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Volume 80
Number 1

The Journal Of The Kentucky Medical Association



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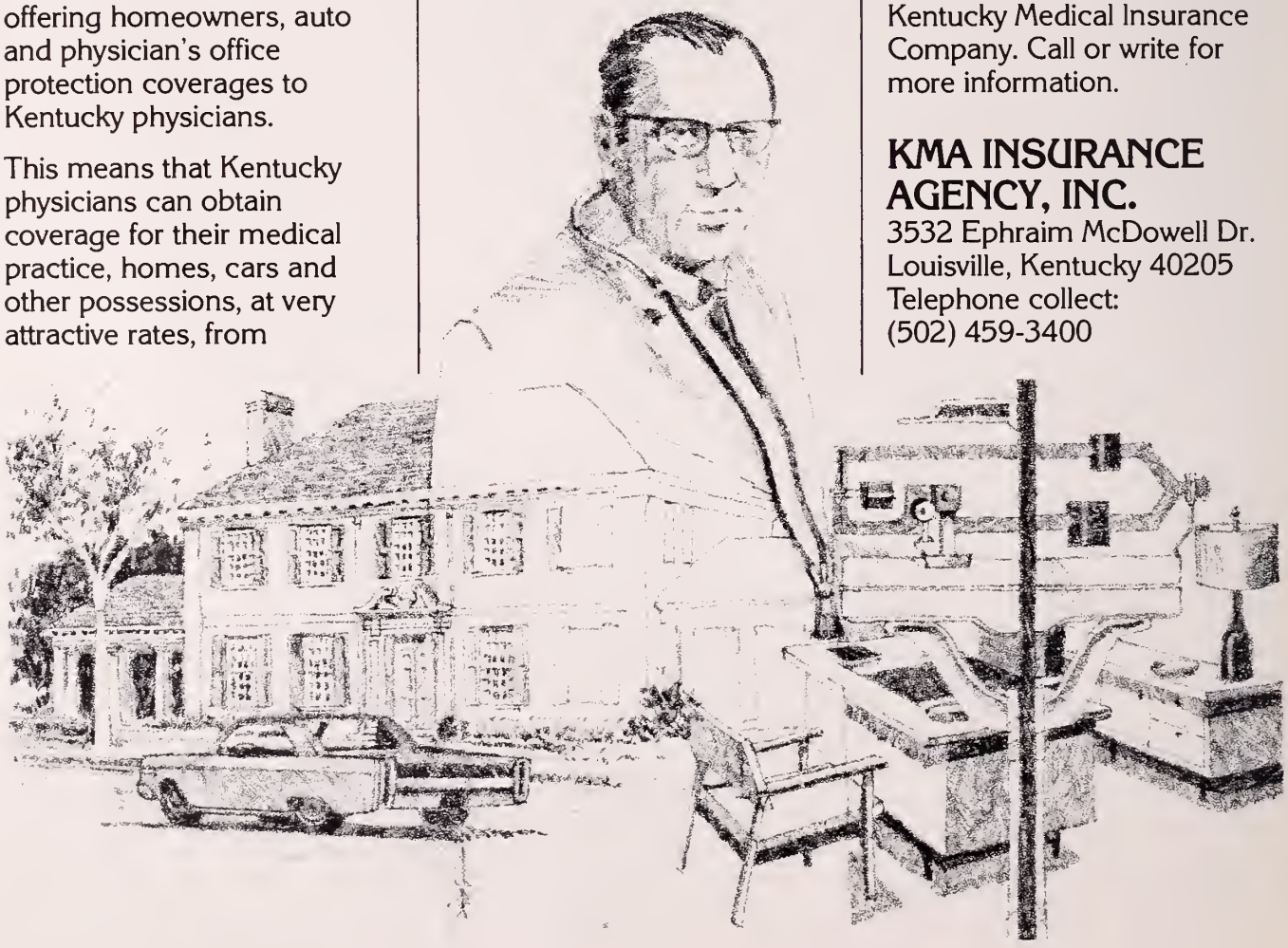
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On The Cover

Cover illustration is taken from the Seal of Kentucky expressing the theme that through unity the challenges of tomorrow can be met. 1982 has been designated "Membership Recruitment Year". Every member is urged to recruit a colleague to KMA.

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PRESIDENT'S PAGE



We begin the new year wondering what horizons will unfold not only for KMA, but for the nation and the world as well. I feel sure medicine will have its usual "bumps and scrapes" but I hope we will also receive some "loving pats" along the way.

I wish to take this opportunity to thank all the members of the Kentucky Medical Association for your confidence in me during my tenure as Chairman of the Board of Trustees and also for your support in my election as President-elect. I wish to thank the executive staff for your support of me and for the fine work you are doing on behalf of medicine in Kentucky and in the nation.

KMA continues to be touted by Secretary Stumbo to become involved in helping to straighten out the medicaid fiasco in Kentucky. Opinions of leadership, staff and the membership vary widely on what, if any, involvement we should have in the overall situation. I personally feel that our lot over the years has been to "sit it out" and take whatever falls off the wagon, and I'm not sure that we want to continue this line of reasoning. Are we going to enhance or degrade our dismal future by taking an active part in decisions before they are made? I feel it is time for KMA to get in on the ground floor and shoulder our share of the responsibility—only if physicians help at this level can we expect to mold a more beneficial program for all concerned.

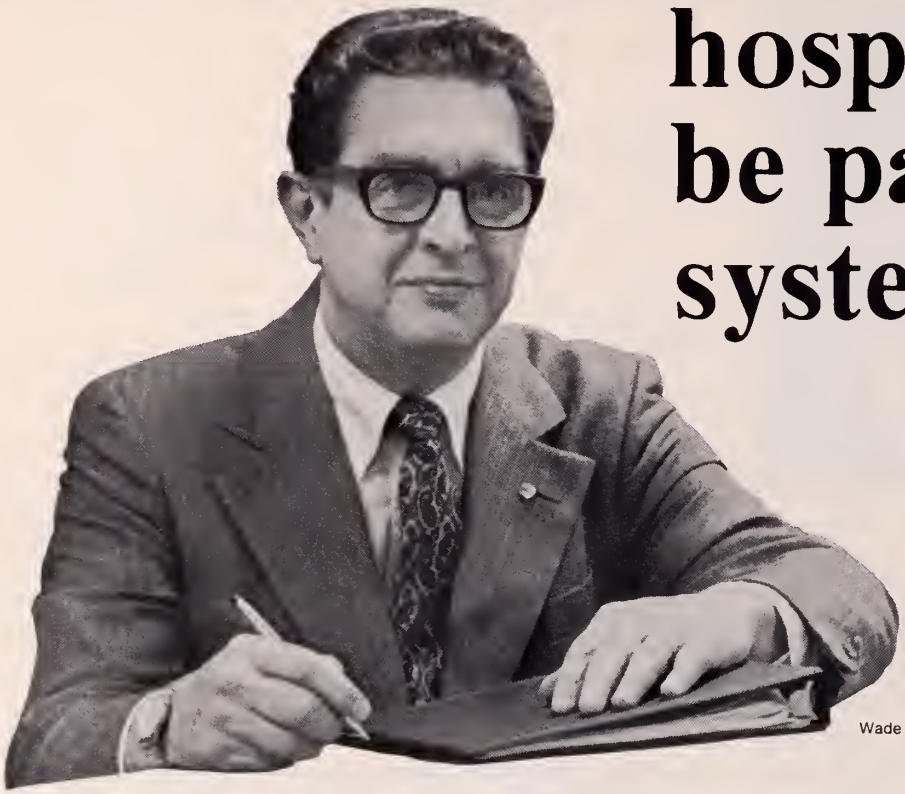
Governmental intrusion continues to be the "thorn in our side" and the time has come to try to extract it. KMA needs the suggestions, advice and help of all the membership in order to arrive at and travel the road we need to follow. I would encourage your participation at whatever level you desire. I am sure we will not be able to comply with every request or suggestion but I assure you that each one will be given consideration.

May I wish each of you continued health and happiness throughout the new year, and extend to you, once again, an invitation to become an active member of organized medicine. Only through our individual involvement in AMPAC, KEMPAC, AMA and KMA can we have a voice loud enough to be heard where it really counts.

HAPPY NEW YEAR!

D. L. Blackburn, M.D.
KMA President-Elect

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CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings)

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DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
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DESCRIPTION

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Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease

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DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period

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The Journal Of The Kentucky Medical Association

January 1982 Volume 80 Number 1

SCIENTIFIC

Why Not The Internal Jugular Vein?

WILLIAM R. JERNIGAN, M.D., F.A.C.S.

IN 1968, the surgical service at Trover Clinic began using the internal jugular vein as an access route to the central venous system for the purpose of monitoring central venous pressure, administering large volumes of fluid and as an IV route when venous cut-down was otherwise indicated. The decision to utilize the internal jugular was made only after considerable deliberation. Reports of rather serious complications from subclavian vein puncture had begun to appear in the literature. As we expanded our experience with the internal jugular and observed minimal complications, it became established as the safest and best route to the central venous system. Its indications have been extended to include hyperalimentation, placement of temporary cardiac pacemakers and Swan-Ganz catheters.

In 1970, we published a report of our experience utilizing the internal jugular vein in 1,000 cases. We described the technique of percutaneous internal jugular puncture and catheter placement. Our reported complications at that time were few as compared to reports from subclavian vein catheterization. Since 1970, the internal jugular has continued to be our route of choice for placement of catheters into the central venous system. The number of percutaneous catheters placed via the internal jugular vein can only be estimated, but our calculations indicate well over 10,000. Our previous reported complications of one air embolism, one septic thrombophlebitis and one hydromediastinum have been significantly reduced over the past decade. Only two additional complications have been encountered. On two occasions broken or severed catheters complicated the procedure. Neither embolized and both were successfully removed from the internal jugular vein by operative intervention under local anesthesia. One neck infection which did not involve the internal jugular vein required incision and drainage. Several temperature elevations responding to removal of the central venous catheters have occurred. Of the previously reported complications, one other hydromediastinum and one septic thrombophlebitis have occurred. The patient with hydromediastinum recovered uneventfully. The patient who developed septic thrombophlebitis died of cardiogenic shock.

Septicemia undoubtedly contributed to her demise. No air embolus of sufficient volume to cause cardiopulmonary symptoms has occurred. Almost invariably, when air embolism does occur it involves the hypovolemic patient who is in respiratory distress. Awareness of the potential for air embolism in these patients, the routine use of the Trendelenburg position and the deliberate occlu-

From the Trover Clinic, Madisonville, Ky. 42431

sion of the needle or catheter with thumb or finger during venipuncture has prevented any significant air embolization. Untold damage can be inflicted on the neck by repeated probing with a long, sharp, large-bore needle. We have found a 14-gauge Venocath with a 1½-inch needle to be ideal to cannulate any internal jugular vein, and feel that longer needles have no advantage and carry increased risk. Infrequently, the carotid artery is inadvertently punctured when attempting internal jugular puncture. No sequelae have resulted from inadvertent carotid puncture, not even a significant hematoma.

One of our senior surgeons prefers the subclavian vein for placement of central venous catheters. The remaining staff uses the subclavian vein as percutaneous access to central venous system only if long term hyperalimentation is anticipated or there is a contraindication to the use of the internal jugular. The subclavian vein is never used by inexperienced house staff.

Septic thrombophlebitis, hydromediastinum and air embolism, retained catheter fragments and catheter embolization are complications which may occur with use of either the jugular or subclavian vein approach. Certainly management of septic thrombophlebitis and retained catheter fragments can be handled with greater ease and less morbidity if these complications occur at the jugular site rather than subclavian site. Only when house staff or young physicians are taught the technique, possible complications, necessity of documentation of proper placement and importance of maintenance of these catheters, will the incidence of complications and death from them be reduced. Placement of a central venous catheter carries a responsibility to the patient of any operation or invasive procedure. From reviewing the literature and talking with surgeons and residents around the country, I am convinced that by far the most frequent complication resulting from central venous catheter placement is pneumothorax. So frequent is this complication that it is considered a fact of life. A young physician who has punctured the lung attempting subclavian vein puncture is seldom chagrined because "everybody does it at some time or other." Pneumothorax should not occur with internal jugular vein puncture with a 1½-inch needle. It has never occurred at our institution. Neither does the less frequent, but very serious complication of hemothorax. It would be superfluous for a seasoned physician who has used the subclavian vein puncture for years with minimal or no complications to convert to the internal jugular vein; but would it not be proper that inexperienced house staff be required to use the internal jugular vein when attempting percutaneous venous access to the central venous stytem? At our institution, medical students at the junior level are taught and allowed to place central venous catheters via the internal jugular vein, but only under careful supervision.

In answer to the question posed, "Why not the internal jugular vein?", with apologies to Socrates, I would answer the question with the query, "Why the subclavian vein?"

References 1. Jernigan WR, Gardner WC, Mahr MM, and Milburn JL: Use of the internal jugular vein for placement of central venous catheter. Surg Gynecol Obstet, March 1970, Vol 130, 520-524.

Management of Stage I and II Glottic Cancer

BABY JOSE, M.D., DMRT, DAVID L. CALHOUN, D.M.D., ALYAS MOHAMMED, D.M.D., DANIEL A. TOBIN, M.D. AND RALPH M. SCOTT, M.D.

A detailed retrospective analysis of 136 patients with early glottic cancer treated at the University of Louisville, Radiation Center from October 1953 to December 1975 was done. Majority of the patients were in the age range of 55 to 74 years. Eighty-nine percent of them were male and 85% belonged to the white race. The most common pathological diagnosis was squamous cell carcinoma. The adjusted five-year survival rate was 84% with a standard error of 3%. Eighteen percent of the patients had local recurrences and 68% of the local recurrences were salvaged by surgery. The overall local control rate was 93%. The median time to recurrence was 92 weeks. There was no case of laryngeal necrosis, and a good quality voice was achieved in majority of the patients. Eighteen second cancers were diagnosed in 17 patients during the follow-up. A brief review of the local failures is also done in the paper.

Introduction

THE optimum treatment of carcinoma of the larynx is that method which will result in cure with preservation of vocal function. At present, there is still a difference of opinion regarding management of early cancers of the larynx. With proper pretreatment evaluation, the same results can be achieved by surgery or irradiation. The advantage of irradiation is the preservation of an essentially normal voice and that majority of radiation failures can be salvaged by surgery. This study is a review of the experience in the management of early glottic cancer at the University of Louisville and detailed analysis of the treatment failures.

Materials And Methods

This study includes a detailed review of 136 patients with early glottic cancer treated at the University of Lousiville Radiation Center from October 1953 to December 1975. Eighty-one patients were grouped as Stage I ($T_1N_0M_0$) and 55 patients as Stage II ($T_2N_0M_0$), using the American Joint Committee (AJC) staging system (Table I).[1]

Seventy-seven percent (105/136) of the whole group of patients were in the age range of 45 to 74 years, 6% (8/136) were below 45 years and 17% (23/136) above 74 years of age. Eighty-nine percent (121/136) of the patients were male and 85% (115/136) belonged to the white race, compared to 11% (15/136) in the black race. In 4% of the patients, the race was not specified. All patients had complete evaluation by both indirect and direct laryngoscopy, after a history and physical examination. Eighty-five percent (115/136) of the cases were diagnosed as squamous cell carcinoma and in 13% (19/136), the diagnosis was carcinoma, type not specified. There was one case each of spindle cell carcinoma and verrucous carcinoma.

Supervoltage irradiation was used in all patients, using open and wedge fields of size 4 x 5 or 6 x 6 centimeters. Majority of the patients received a midplane dose of 6500 rad in 6 to 6½ weeks time, with a daily fractionation of 180 to 200 rad.

From the Department of Therapeutic Radiology, University of Louisville, James Graham Brown Cancer Center, 529 S. Jackson St., Lousiville Kentucky 40202. Reprint requests to: Baby Jose, M.D., DMRT, Radiation Center, 500 South Floyd Street, Lousiville, KY 40202

TABLE 1
CLINICAL STAGING SYSTEM FOR CARCINOMA OF THE GLOTTIC LARYNX,
American Joint Committee
July 1972 Revision

T PRIMARY TUMOR

- T_1 Tumor limited to one anatomical region within the larynx with normal mobility.
 - T_{1a} Tumor confined to one vocal cord and mobility of cord remains normal.
 - T_{1b} Tumor involving both cords with normal mobility of cords.
- T_2 Tumor extending from cords wither to subglottic region or to supraglottic region, i.e., to ventribular bands or ventricles (includes those patients with normal and/or impaired mobility of cords).
- T_3 Tumor limited to larynx with fixation of cords.
- T_4 Tumors of cords that extend beyond larynx, i.e., into cartilage, to the pyriform sinus, or to the postcricoid region, skin etc.

N REGIONAL NODES

- N_0 Cervidal nodes not palpable.
- N_1 Palpable cervical lymph nodes, homolateral, not fixed.
 - N_{1a} Metastasis not suspected.
 - N_{1b} Metastasis suspected.
- N_2 Palpable bilateral, contralateral, or midline lymph nodes not fixed.
 - N_{2a} Metastasis not suspected.
 - N_{2b} Metastasis suspected.
- N_3 Fixed cervical lymph nodes, metastasis suspected.

M DISTANT METASTASIS

- M_0 No distant metastasis.
- M_1 Clinical or radiographic evidence of distant metastasis.

TABLE 2
SURVIVAL DATA
(Actuarial Method)

Stage	5 Year Crude Survival	5 Year Adjusted Survival
All Patients	68% ± 4%	84% ± 3%
Stage I ($T_1N_0M_0$) (81 patients	69% ± 5%	86% ± 4%
Stage II ($T_2N_0M_0$) (55 patients)	68% ± 6%	81% ± 5%

TABLE 3
CONTROL AT PRIMARY SITE

	No. of Patients	Percent
Primary Controlled by irradiation	111/136	82
Local Failures	25/136	18
Controlled by Surgery	15/22*	68
Overall Local Control	126/136	93

Median Time to Recurrence—92 weeks

* Two patients died with intercurrent disease during radiotherapy, without having surgery. One patient was recommended surgery, but lost for follow-up.

TABLE 4
SURGICAL TREATMENT OF LOCAL FAILURES

TYPE OF TREATMENT	NO. OF PATIENTS	PERCENT
Laryngectomy alone	14/22	64
Laryngectomy + Neck Dissection	3/22	14
Laryngectomy + Irradiation	4/22	18
Stripping	1/22	4
TOTAL	22/22	100

Results

The actuarial (Life Table) survival method was used in the calculation of the survival rates. Those patients who were dead with intercurrent disease without glottic cancer were withdrawn from the risk of death from glottic cancer when the adjusted survival rates were calculated. The crude five-year survival rate was 68% with a standard error of 4% and the adjusted five-year survival rate was 84% with a standard error of 3%. Table 2 refers to the survival figures to each stage of the disease. Stage I and II patients had an adjusted five-year survival rate of 86% with a standard error of 4% and 81% with a standard error of 5%, respectively.

TABLE 5
IRRADIATION FAILURES IN GLOTTIC LESIONS $T_1N_0M_0$

Authors	Years	Number of Cases	Failures No.	Failures %	Failures Controlled By Surgery	5-Year Survival No.	5-Year Survival %
Constable, et al.[4]	1956-1971	107	10	9	6.6	89/107	83
Wang[5]	1953-1972	325	32	13	33/40	282/325	87
Jorgensen[6]	1963-1968	44	6	14	6/6	41/44	93
Ennuyer, et al.[7]	1958-1968	71	10	14	7/10	58/71	82
Fletcher, et al.[8]	1955-1967	210	30	14	26/29	206/210	98
Hawkins[9]	1955-1971	260	54	21	37/54	207/260	80
Borsch, et al.[10]	1960-1972	24	5	21	3/5	20/22	91
Present Series	1953-1975	81	10	12	8/10	70/81	86

TABLE 6
IRRADIATION FAILURES IN GLOTTIC LESIONS ($T_2N_0M_0$)

Authors	Years	Number of Cases	Failures No.	Failures %	Failures Controlled By Surgery	5-Year Survival No.	5-Year Survival %
Wang[5]	1953-1972	90	25	28	18/23	65/90	72
Jorgensen[6]	1963-1968	25	11	44	7/11	18/25	72
Ennuyer, et al.[7]	1958-1968	27	9	33	4/7	14/27	52
Fletcher, et al.[8]	1955-1967	120	35	29	23/31	108/120	90
Hawkins[9]	1955-1971	73	27	37	11/27	44/73	60
Borsch, et al.[10]	1960-1972	8	3	38	2/3	6/7	86
Present Series	1953-1975	55	15	27	7/15	45/55	81

Recurrences

Local failures were encountered in 18% (25/136) of the patients. The median time to recurrence was 92 weeks. Sixty-eight percent (15/22) were salvaged by surgery. Ninety-three percent (126/136) of the patients had the overall local control (Table 3). Of the 25 patients with local failures, two patients were dead with intercurrent disease during irradiation and one patient was lost for follow-up even though surgery was recommended. Table 4 refers to the type of surgical treatment for the local failures.

Complications

There was no case of laryngeal necrosis in this study and the postirradiation hoarseness and occasional laryngeal edema were controlled with sufficient voice rest and antibiotics.

Second Cancers

Eighteen second cancers were diagnosed in 17 patients during the follow-up and lung was the most common site (5 cases). No second malignancy was diagnosed in endolarynx in this group of patients.

Discussion

The five-year cure rates by irradiation in Stage I and II glottic carcinoma range from 70 to 90%.[2,3] In our study the five-year adjusted survival rate is 84%, which is comparable to other reported series. Most of the patients tolerated the treatments extremely well, and a good quality voice is preserved in the majority of the patients.

The patients who were treated were advised to have voice rest and avoid continued smoking. This will improve the quality of voice and prevent the chance of late second primary. Smoking is known as a causative agent for cancer of the head and neck, and in this series a majority of the patients used to smoke before the diagnosis was made.

The rate of recurrence at five years for $T_1N_0M_0$ lesions range from 9% to 21% (Table 5) and for $T_2N_0M_0$, it is from 28% to 44% (Table 6). The local failure rate in this series is comparable to the reported results. In a high percentage of local failures salvage is possible with surgery as in our series. Patients should be followed at two to three month intervals in the first three years after the treatment, since the majority of the local failures occur during that time. Long-term follow-up is

also important to diagnose the few late recurrences and to detect the second cancers.

In our study lung cancer was the most common second cancer, and there was no second malignancy of the endolarynx, which is similar to other reported series. No increase incidence of radiation-induced cancers could be demonstrated in this study.

In conclusion, irradiation is an effective primary treatment modality in the management of early glottic cancer, with a good quality of voice in the majority of the patients treated.

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Post-Infarction Left Ventricular Aneurysms

ZAHI H. MASRI, M.D., ALLAN M. LANSING, M.D. and ROLAND E. GIRARDET, M.D.

Experience with left ventricular aneurysm with and without concomitant coronary bypass grafts have been reviewed in the past 10 years. Sixty-three patients were operated on, 23 had isolated resection and 38 underwent resection with coronary bypass grafts. Two underwent resection with other procedures. Concomitant coronary bypass graft actually carried much less intraoperative and hospital mortality than isolated resection. The late mortality for both procedures is almost the same. Preoperative severe congestive heart failure and low cardiac output were major determinants of intraoperative mortality. Postoperative serious arrhythmias and pulmonary embolisms were mainly responsible for hospital mortality. Viability and functional capacity of the myocardium after resection determines the quality and quantity of long term survival.

LEFT ventricular aneurysm is a serious complication of transmural myocardial infarction. Necrosis of a segment of the wall of the left ventricle is replaced by weak localized noncontractile scar tissue which yields under left ventricular pressure to form a bulge in the left ventricular wall. In most cases the aneurysm occurs many weeks after myocarial infarction. Thrombosis within the aneurysm, calcification in its wall and adhesions to the pericardium are common findings. Most ventricular aneurysms occur at the antero-apical portion of the left ventricle because of lack of dual blood supply to that area (blood supply contributed from LAD). Occurrence of left ventricular aneurysms on the lateral and inferior surfaces of the left ventricle is unusual despite the frequency of myocardial infarction in these regions presumably because of dual blood supply (RCA and Cx). The septum has also a rich blood supply and is seldom involved in aneurysm formation by itself.

The major complications of left ventricular aneurysms are:

1. Congestive heart failure with and without angina.
2. Ventricular tachyarrhythmias:
 A. Ventricular fibrillation.
 B. Ventricular tachycardia.
 C. Multiple PVC's sufficiently frequent to warrant antiarrhythmic treatment.
3. Systemic embolization causing:
 A. Transient ischemic episodes or stroke.
 B. Peripheral vascular occlusive events.

Chronic congestive heart failure, thrombo-embolic events, rupture and new acute myocardial infarctions are the major causes of death in patients with left ventricular aneurysms.[1,2] Medical treatment of left ventricular aneurysms consists of salt restriction, digitalization, diuretics, antiarrhythmic agents, sometimes cardiac pacing for overdrive suppression and anticoagulation. Surgical resection is indicated for moderate to severe symptoms.[3,4,5,6,7,8,9,10]

Our experience with surgical treatment of left ventricular aneurysms between August 1969 through December 1980 has been reviewed Sixty-three patients underwent resection of left ventricular aneurysm during this period of time. Operative indications were congestive heart failure, angina and ventricular arrhythmias. Thirty-nine patients had simultaneous coronary bypass graft in addition to left ventricular aneurysmectomy, one patient had simultaneous mitral valve replacement and another had repair of a ventricular septal defect with a patch.

TABLE 1
LEFT VENTRICULAR ANEURYSM AND CBG

ISOLATED RESECTION	25(39.6%)
RESECTION AND CBGx1	16(25.4%)
RESECTION AND CBGx2	17(26.9%)
RESECTION AND CBGx3	3
RESECTION AND CBGx4	2

Material and Methods

Sixty-three patients had resection of left ventricular aneurysm between August 1969 through December 1980. All of these cases were due to coronary arteriosclerosis and myocardial infarction. There were 47 males and 16 females. Age range was from 37 to 71 years. Most of the patients complained of easy fatigability and dyspnea on exertion. 47% of the patients had varying degrees of symptoms of congestive heart failure with or without angina and 50% of the patients had angina alone. 9% had intractable congestive heart failure and low cardiac output. 21% had serious ventricular arrhythmias and 7% had peripheral embolization. The above clinical manifestations were indications for operative management in our series. Diagnosis of left ventricular aneurysm was made by means of ventriculography and coronary angiography. This was confirmed intra-operatively by the presence of markedly scarred and thinned left ventricular wall with paradoxical motion. The left main coronary artery was markedly stenosed in 7%, the circumflex system had crucial stenosis in 45% and the right coronary artery in 49%. The LAD was occluded and not bypassable in most of the cases except when the aneurysm was located inferiorly or on the lateral wall of the left ventricle. Extensive adhesions of the pericardium to the heart were found in 52% of the patients and marked mural thrombosis was found in 69% of the patients. Most of the aneurysms were located on the apical and anterolateral wall of the left ventricle. The aneurysms were extensive in three patients and were on the diaphragmatic surface in two patients and localized to the lateral wall in two patients. The aneurysm was resected in all but one patient where plications were done. Sixteen patients had single coronary bypass graft, 17 patients had double, three patients had triple and two patients had quadruple coronary bypass grafts in addition to aneurysm resection. One patient underwent simultaneous repair of ventricular septal defect with patch and another underwent mitral valve replacement. Presence of extensive left ventricular aneurysm and low cardiac output were major determinants of intraoperative mortality and serious ventricular arrhythmias were the cause of most of the immediate postoperative mortality.

TABLE 2
LEFT VENTRICULAR ANEURYSM 1969-1975

OVERALL MORTALITY in	10 patients	
INTRAOPERATIVE MORTALITY	3 patients	30%
HOSPITAL MORTALITY (1-30 days)	3 patients	30%
LATE MORTALITY (2yrs-7yrs, 7mon.)	2 patients	20%

NB: 2 patients remain alive and well

Operative Technique

The approach to the heart is through a median sternotomy incision. On exposure of the heart, Heparin is given and cardiopulmonary bypass instituted. Moderate hypothermia is used, myocardial preservation is accomplished with cold potassium cardioplegia and topical cooling with ice cold Lactate Ringers solution. The aorta is cross-clamped before manipulating the aneurysm to prevent embolization. Pericardial adhesions are lysed, longitudinal incision is made in the center of the aneurysm parallel to the septum, the ventricle is carefully emptied of blood clots and care taken not to dislodge the mural thrombus inside the left ventricular cavity. The left ventricular cavity is packed with gauze temporarily and the wall of the aneurysm is resected within a half inch of the muscle margin. The scar into the interventricular septum was not excised in our series but included in the closure. The defect in the ventricle is closed with 0 Tevdec suture as a running mattress stitch reinforced with an "over and over" running suture. Teflon felt pledgetts are occasionally used. A vent is placed through either ventricular suture line or through the right superior pulmonary vein. Coronary anastomoses and/or other ancillary procedures were carried out following a resection of the aneurysm and closure of the ventricle. With VSD the ventricle is closed after the VSD is repaired. Rewarming is gradually

TABLE 3
LEFT VENTRICULAR ANEURYSM 1976-1980

OVERALL MORTALITY IN 53 PATIENTS

INTRAOPERATIVE MORTALITY	2 patients	3.7%
HOSPITAL MORTALITY	5 patients	9.4%
LATE MORTALITY	5 patients	9.4%

(mean follow up 28.7 mon.)

TABLE 5
LEFT VENTRICULAR ANEURYSM FATE OF SURVIVALS
(43 patients)

ASYMPTOMATIC (class I)	30	73%
MILD DYSPNEA ON EXERTION AND MILD ANGINA (class II)	10	24%
CHF	1	2%
NO FOLLOW UP OBTAINED	2	

TABLE 4
LEFT VENTRICULAR ANEURYSMECTOMY
EARLY AND LATE MORTALITY WITH OR WITHOUT CBG

	ISOLATED RESECTION	RESECTION AND CBG	RESECTION AND OTHER PROCEDURES
NUMBER OF PATIENTS	23	38	2 (MVR & VSD)
INTRAOP. MORTALITY	3 (13%)	2 (5.2%)	0
HOSPITAL MORTALITY	5 (22%)	3 (8%)	0
LATE MORTALITY	3 (13%)	4 (10%)	1 (MVR) (septicemia)

started during the closure of the left ventricular defect or during the last anastomoses of the saphenous vein graft to the coronary arteries. Air is aspirated from the ventricle, the left atrium, the aortic root and the aortic clamp is removed. Proximal anastomoses were made to the aorta while re-warming is going on. Ventricular suture line is carefully examined for hemostasis while the heart is beating prior to discontinuing the bypass.

Results

Five patients died intraoperatively, eight patients died one to 30 days postoperatively of malignant arrhythmias, pulmonary embolism, or low cardiac output. Seven patients died during follow-up mainly of recurrent myocardial infarction. The follow-up of two patients could not be obtained. Of the forty-one patients followed-up 30 did well and are symptom free (Class I), 10 patients had mild shortness of breath or mild angina (Class II), and one patient continues to have symptoms and signs of congestive heart failure.

Discussion

Left ventricular aneurysms occur in about three to 20% of patients after myocardial[11,12] infarction. Symptomatic left ventricular aneurysm has an adverse effect on survival.[1,3] The five-year mortality rate for symptomatic left ventricular aneurysm treated medically is described to be in the vicinity of 88%.[11,12] Major causes of death are progressive congestive heart failure, and recurrent myocardial infarction. Left ventricular aneurysmectomy offers a better alternative treatment for patients with moderate to severe symptoms. Improvement in operative technique, intraoperative myocardial preservation and peri-operative support makes the surgical approach to this complication of coronary artery disease safe and effective when indicated. Coronary bypass grafting simultaneous with resection of the aneurysm is a relatively safe procedure.

Operative mortality for left ventricular aneurysmectomy ranges from 4.5% to 18%. Clinical improvement is described to range from 67% to 90% and the late mortality 5.4% to 21% with a follow up of nine months to seven years.[3,4,5,6,7,8,9] Major determinants of the outcome of the surgery depend on the mode of clinical presentation before surgery, *ie*, severe congestive heart failure, low cardiac output and intractable ventricular tachyarrhythmias and the state of left ventricular function after resection of the aneurysm.[3,4,5,6,7,8,9,10]

Malignant ventricular arrhythmias continue to yield an inferior operative and postoperative survival rate. They however in no way constitute a contraindication for surgery with the hope that a combination of operative treatment and continued medical management postoperatively will control this complication. The future use of intraoperative electrophysiologic studies to delineate and resect the area responsible for genesis of recurrent tachyarrhythmias remains to be seen.[11] Concomitant

coronary bypass grafting when indicated is a safe procedure and does not add to the intraoperative or hospital mortality. In our series it carried less risks. Our results become meaningful when we view our experiences in two stages. Ten patients were operated on from 1969 to 1975. Three of the patients presented with intractable congestive heart failure, low cardiac output and extensive left ventricular aneurysm. One of them also had recurrent ventricular fibrillation. The prognoses was well predicted preoperatively and the operation was performed in a desperate effort to save their lives. All died intraoperatively accounting for an intraoperative mortality of 30% during that period of time. The hospital mortality was also high. Recurrent malignant ventricular arrhythmias claimed the lives of two patients and pulmonary embolization took the life of the third one. Two late mortalities occurred two years and seven years and seven months postoperatively from recurrent myocardial infarctions. After 1975 the operative mortality dropped precipitously to 3.7% and the hospital mortality to 9.7%. Fewer cases presented after 1975 with intractable congestive heart failure, low cardiac output and extensive left ventricular aneurysm but virulent ventricular arrhythmias and pulmonary embolization remained the major causes of hospital mortality. One of the mortalities from ventricular arrhythmias was unfortunately due to digitalis toxicity. The mean follow-up of patients since 1976 was 28.7 months with a late mortality of 9.4%. One mortality was due to septicemia and endocarditis two months following concomitant mitral valve replacement and one was from development of intermittent bradycardia and heart block three months postoperatively in which a pacemaker should have been implanted and three patients died from recurrent myocardial infarction. The two survivals from the early series are alive and doing very well. In the late series 41 patients are followed up. Thirty patients (73%) are alive and doing well (Class I). Ten patients (24%) are Class II and one patient remains with congestive heart failure and angina. Long term survival however depends on the extent of coronary artery disease, associated cardiac defects, viability and functional capacity of the remaining myocardium and in summary the benefit to the patient in terms of improved functional capacity following aneurysm resection with and without revascularization remains good. Most of our long term survivals are enjoying life and carrying on normal daily activities.

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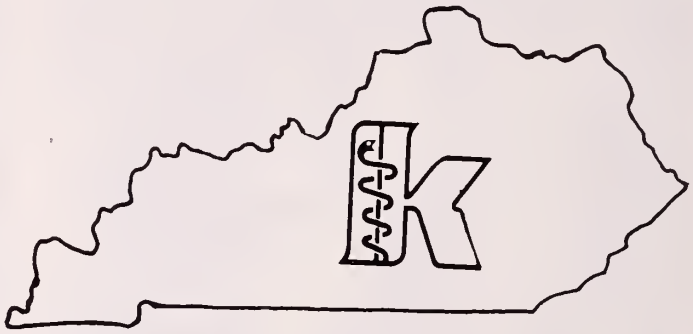
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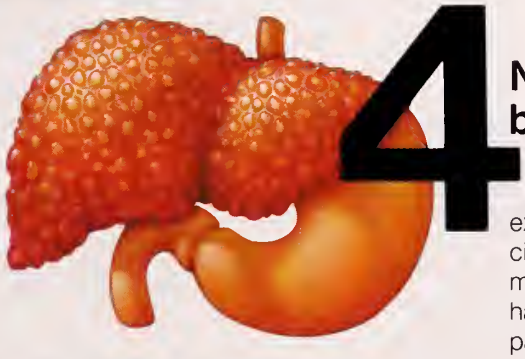
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Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan® IV for (lorazepam) Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

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Wyeth Laboratories
Philadelphia, PA 19101

Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Committee on Physicians' Health



Vesicoenteric Fistula

ROBIN ATWELL, M.D., DAVID ALLEN, JR., M.D., JAMES MOHLER, M.D., ANTHONY CASALE, M.D. AND ROBERT FLANIGAN, M.D.

The etiology, presentation, diagnosis and treatment of vesicoenteric fistulas is presented. A case study illustrates the most common etiology, diverticular disease, and presentation, dysuria and pneumaturia with urinary tract infection. Cystourethroscopy provided confirmation of the diagnosis. A single stage repair with resection and primary anastomosis provided an excellent surgical result. Omental interposition between the bladder and bowel repair may prevent fistula recurrence.

Introduction

Rufus of Ephesus reported the first case of vesicoenteric fistula in the second century.[1] Not until the mid-nineteenth century did sporadic reports of this uncommon condition appear in the British literature. In 1850, Pennell[2] performed the first curative surgical procedure. The first report of a colovesical fistula resulting from diverticulitis, today the most commonly associated disease, appeared in an 1859 case report by Jones.[3] The first series with an accurate description of the symptoms and physical findings was the classic treatise of Harrison Cripps[4] published in 1888.

A century ago, syphilis, tuberculosis, actinomycosis, amebiasis and typhoid were implicated in the pathogenesis of vesicoenteric fistula. As patterns of disease changed, diverticular disease, neoplasia, and inflammatory disease replaced the infectious diseases as the most commonly associated processes.

Though the inciting pathology involves the gastrointestinal tract, urologic symptoms predominate, and without a high index of suspicion, diagnosis may be delayed for some time. A pathognomonic history may be elicited, but diagnostic studies are essential in demonstrating the underlying pathology and area of intestinal involvement, allowing individualization of surgical therapy.

From the Albert B. Chandler Medical Center, Department of Surgery, University of Kentucky, 40536.

Case Report

A 58-year-old white male first presented to an emergency room with complaint of fecaluria, intermittent dysuria, nocturia, diminished stream and previous fever and chills. Physical examination was unremarkable except for balanitis. Urinalysis showed 30-40 WBC/HPF, 1-5 RBC/HPF, 1+ bacteriuria, positive nitrite, and budding yeast. Urine culture produced greater than 100,000 *E. coli* and greater than 100,000 *Enterobacter cloacae*. The diagnosis of *candida* balanitis and urinary tract infection was made and the patient was begun on sulfamethoxazole/trimethoprim.

He returned one week later and was seen by the same physician with a "funny story Every few days after he urinates, brown drainage comes out of his meatus." Physical examination was unchanged. He was treated with tetracycline for "prostatitis," and instructed to return for proctoscopy and cystourethroscopy if unimproved.

One month later, he returned bringing with him a tomato peel and pea hulls passed per urethra, and volunteering a history of pneumaturia and bleeding per rectum. Urologic consultation was obtained and a diagnosis of vesicoenteric fistula made. Physical examination was remarkable for severe chronic obstructive pulmonary disease and hematest positive stool. Admission urine culture grew greater than 100,000 *E. coli.* Renal function was normal. Abdominal series was unremarkable.

An excretory urogram the day following admission was normal and proctoscopy to 25cm showed only patchy "erythematous mucosa." Upper GI series showed thickened gastric and duodenal folds, and small bowel follow through was normal. Cystourethroscopy showed a 2-3cm area of nodular erythematous mucosa and bullous edema in the dome posteriorly. Biopsy of the area demonstrated cystitis glandularis and chronic inflammation. Fecal contents were seen in the bladder; however, no fistula was identified. A simultaneous cystogram and gastrograffin enema were obtained which demonstrated a mass effect between the indented bladder dome and a redundant loop of diverticulum-laden sigmoid colon.

The patient underwent mechanical and antibiotic bowel preparation, and on the 12th hospital day underwent laparotomy. At operation, a mass of friable inflammatory tissue was interposed between bladder and sigmoid colon. A one-stage procedure was performed involving segmental sigmoid resection with primary anastomosis, segmental cystectomy with three-layer closure, incidental appendectomy, suprapubic tube bladder drainage, and transposition of an omental pedicle graft to the pelvis to wrap the anastomosis. Pathological examination revealed diverticulosis, chronic inflammation and a fistulous tract.

Discussion

Etiology

This case illustrates several characteristics of vesicoenteric fistulas. Colovesical fistula is the most common type, although fistulas can occur at any level from duodenum to rectum and from renal pelvis to urethra.[5] Diverticulitis is the underlying disease in more than half of the cases of vesicoenteric fistulas, followed by carcinoma and inflammatory bowel disease. The incidence of colovesical fistula formation in diverticulitis varies from 2%[6] to 22.8%,[7] with an average of 10%.[8] Black and Bolt[9] found 8.5% of vesicoenteric fistulas to be ileovesical, and 30-40% of these were due to Crohn's disease. The incidence of vesicoenteric fistula complicating Crohn's disease is 1.6% in the largest series to date.[10] Of fistulas resulting from neoplasia, 75% follow adenocarcinoma of the sigmoid or rectum, and 25% result from cancer of the bladder, cervix, or other pelvic organs.[11] The remaining small proportion of fistulas arise following radiation therapy, trauma and iatrogenic injury.

Diverticulitis and adenocarcinoma of the colon are most common in the fifth and sixth decades, and as expected, most patients with vesicoenteric fistulas present during these years. Most series indicate a male to female incidence of three to one with some authors speculating that interposition of the uterus and adnexae between the bladder and sigmoid offers protection to the female.[11] Others suggest that the usual fascial attachments in the smaller male pelvis act to maintain the colon and bladder in closer proximity.[12]

Clinical Presentation

Diagnosis is dependent upon an adequate history and a high index of suspicion. Due to the insidious onset of suprapubic discomfort, dysuria, frequency, and urgency, diagnosis is often delayed. In one series, the average duration of symptoms prior to diagnosis was four months.[6] Two thirds of patients present with symptoms of recurrent cystitis; dysuria is most often the primary complaint. Over 60% will have urinary tract infections, predominantly *E. coli.* Hematuria is rare. Febrile episodes are not uncommon although systemic illness is rare perhaps due to intermittent decompression of the infectious process into the bladder.

Pneumaturia is pathognomic for vesicoenteric fistula if recent cystourethroscopy and gas-forming urinary pathogens can be excluded. A history of terminal pneumaturia can be elicited from more than 50% of these patients. They most often describe a "hiss" at the completion of voiding. Fecaluria eventually occurs in half of the patients and, though pathognomic, is generally preceded by pneumaturia.

Less than half of patients develop intestinal symptoms, with mild to severe cramping pain in the suprapubic area or left lower quadrant being most prominent. Patients with fistulas secondary to diverticulitis present with a greater number of gastrointestinal symptoms than those with carcinoma.[15] In most instances, the diagnosis of diverticulitis has been established prior to the development of the fistula. Diverticulitis in the presence of urinary tract infection should always raise the question of occult fistula. A few patients present with known diverticulitis and pelvic pain or a pelvic mass months prior to development of a fistula. Diarrhea and watery stools, except in Crohn's disease, are very uncommon because the pressure gradient is from bowel to urinary tract.

Diagnostic Procedures

Diagnosis is often made by the history, but radiographic studies and endoscopic evaluation are mandatory in assessing the level of involvement as well as the underlying process.

Excretory urography rarely helps in confirming the diagnosis, but is indicated in any patient with refractory urinary tract infections. Cystography rarely defines the fistula but often demonstrates mucosal irregularity or extrinsic compression of the bladder by an adjacent loop of sigmoid colon, usually on the left superior portion of the dome. Sigmoidoscopy also rarely demonstrates the fistula but it is recommended to exclude the diagnosis of carcinoma. In most series, barium or gastrografin enema are most useful in revealing colon pathology. Moisey demonstrated the underlying intestinal lesion in 51 of 52 patients in this manner, and in 15 defined a fistula.[14] West points out the advisability of obtaining contrast studies of the small bowel.[15] In his series of 28 patients, the diagnosis of the two cases of regional enteritis were delayed four and 18 months because of failure to obtain this study.

Cystourethroscopy is the most important examination in confirming the diagnosis of vesicoenteric fistulas. Though it is rare to visualize the fistula, it is common to see an area of bulbous edema, granulating tissue or ulceration which is often associated with fecal seepage.[6] Biopsy usually demonstrates chronic inflammation or cystitis glandularis. Firfer cautions that rebiopsy may be indicated since the inflammatory reaction is often severe and metaplasia might be interpreted as carcinoma by the pathologist.[12]

Treatment and Prognosis

Only the very rare vesicoenteric fistula will close without surgical intervention. Multi-staged procedures, usually involving diverting colostomy, then resection and finally reanastomosis were invariably advocated 30 years ago. However, Shatila and Acherman[16] note that transverse diverting colostomy does not arrest the basic disease process; new fistulas may develop in patients awaiting resection in spite of decompression. Resection of the fistula without bowel resection is associated with a high rate of recurrence. If adequate catheter drainage of the bladder is possible, simple closure of this end of the fistula or resection and three-layer closure is all that is required, with drainage of the bladder maintained for two weeks.

Recent studies indicate that single stage procedures with primary resection and anastomosis may be used in selected patients.[17,18] If the inflammatory process is not fulminant and the anastomosis is performed in normal, non-obstructed bowel, a single stage procedure is possible[19] in the patient who is a good operative risk.[20] Carpenter's[20] series of nine patients with a fistula secondary to diverticular disease treated by primary resection and anastomosis included no mortalities or serious complications. In addition, patients were able to resume normal activity at an earlier date than patients treated by staged procedures.

West[15] describes a patient in which a second vesicocolic fistula occurred six months following primary resection. He suggests that omental interposition[21,22] between the bladder repair and the bowel anastomosis may have prevented this complication.

Fistulas secondary to radiation necrosis or malignancy, whether adenocarcinoma of the colon or transitional cell carcinoma of the bladder, convey an ominous prognosis. In these cases, palliative diverting colostomy may be prudent. In contrast, patients with fistulas resulting from diverticular or inflammatory disease, with accurate diagnosis, careful preoperative assessment, and

sound surgical judgment, have an excellent prognosis and gratifying surgical results.

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FOR FURTHER DETAILS

John S. Spratt, M.D.
Program Coordinator
J. Graham Brown Cancer Center
529 So. Jackson Street
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The Twenty-seventh Annual Spring Clinical Conference, presented by the Lexington Clinic, Lexington, Kentucky will be held on April 1, 1982.

The 1982 conference topic is "Specialty Problems in Primary Care."

The guest lecturer is:

Harold J. Fallon, M.D.
William Branch Porter Professor
Chairman, Department of Medicine
Medical College of Virginia
Virginia Commonwealth University
NCV Station
Richmond, Virginia

Mass Production

BACK in time, soon after World War II, the traveler in East Africa could find a very attractive array of wood carvings for sale by the carver himself. They were artfully, even lovingly crafted of Africa's beautiful woods and the price, not really cheap, reflected painstaking work. Most of it was very good.

Over the years the demand increased and so did the supply. So did the price. But the quality plummeted. I enquired of the carvers, "A white man came from Europe with a machine that could make a copy of anything placed within it." Progress. So now those who sold were not themselves carvers, but marketing specialists. The grain and color and texture and quality of the wood were ignored in the copying and yet the price went even higher, but the demand was met and surpassed by a flood of "genuine African carvings" with the superficial appearance of handwork but the uniformity of mass production, now available in every town in America large enough to have a gift shop. One wonders whatever became of the real craftsmen.

Mass production for washing machines and eggs, shoes and chairs, is generally essential. But Medicine has been a handcraft in America, even though its quality varies from exquisite to ordinary to sloppy. We all know physicians who are poor craftsmen. Some only pretend. A few are patently deceitful. Some are frightfully overpriced. Still, medical care in our State is generally good and is offered up on an individual basis, person to person, by mostly conscientious physicians who hope the patient will somehow be better because of the encounter.

And now come the strangers, not themselves healers, who seek to exist and then to fatten on physicians and their patients. Whatever the original intentions of these strangers, they seek to grow arrogant and strong and they thrive only when we mass produce medicine for them.

On the surface it may look pretty good. They will probably offer physicians stability, security and schedules. Patients could get convenience, glossy contrivances and pedestrian care at great cost. But one senses, and sometimes observes that we will not be really profitable to big business and big government until we, physicians and patients, are neatly organized into manageable bundles and rafts.

It is easy, especially for those who care little and know less of human nature or protoplasm to make a strong case for Mass Produced Medicine. A Machine that produces the shape of good care by using Technique with its efficiency and frills and forms is marvelous to behold. But technique alone is not enough. To it must be added the caring element, that is, a healing attitude in a healing atmosphere—and this is the strength of medicine as we know it now, our strongest ally as we come up against the regulators and the corporate giants. So long as we deal with each sufferer as an individual, noting the textures and qualities of them and their complaints, then we'll outdo the Machines because we handcraft care. It is when we spend too little time, charge too much money, forget to ask questions, ignore the personal elements, refuse to look and feel and listen, that we weaken our claims to be craftsmen. For when there is illness to be dealt with, ASA prescribed with concern and interest beats an aspirin from a dispensing slot, just as handcrafted care beats the care that is squeezed out by the most sophisticated Machine.

David L. Stewart, M.D.

DRAMATIC NEW CLINICAL PROOF*

In the treatment of impetigo–

- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**



As seen on admission



After one week of penicillin V-K therapy



Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® *(cloxacillin sodium)*	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus* and *Streptococcus pyogenes	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup. These were all called by telephone, and their families reported the lesions had healed. One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus,* 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes,* and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
(cloxacillin sodium)
–effective therapy for staph infections of the skin and skin structures

WARNING:
Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:
The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:
Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:
Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

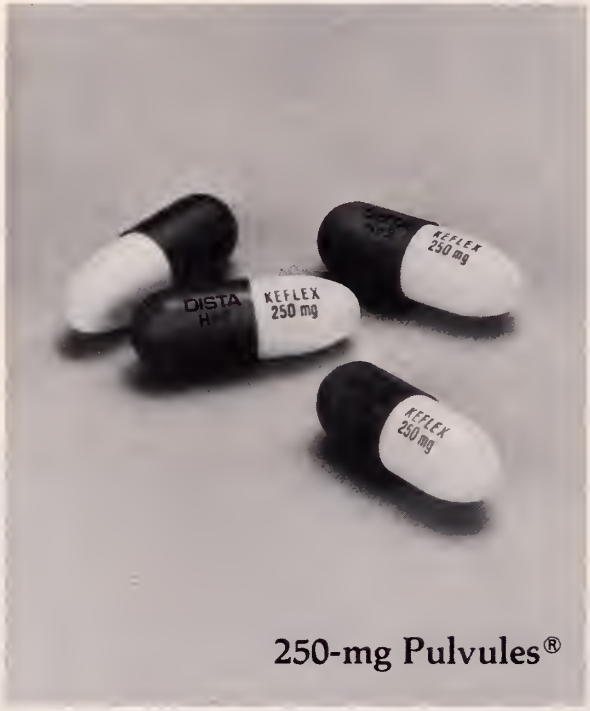
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Spotlight On Medical Market Model

"The medical market model" . . . "pro-competition" . . . "consumer choice" . . . are terms frequently used today to describe the latest legislative strategy to control the delivery and cost of medical care. The competition approach seeks to restructure the current health care system by creating new incentives for individuals to choose alternate insurance coverage plans. The approach appears to be as politically attractive to the current administration as national health insurance has been to previous ones.

The model or pro-competition approach is a project developed in the 1970's by Alain Enthoven, Ph.D., at the request of then HEW Secretary, Joseph Califano. The result was Enthoven's "Consumer Choice Plan" which was subsequently rejected by the Carter administration. However, the plan and variations of it, have received some degree of acceptance from the Reagan administration.

Former Senator Richard Schweiker, who is now Secretary of the Department of HHS, and former U.S. Representative David Stockman, who is now head of the Office of Management and Budget, have both previously introduced their versions of pro-competition bills in Congress, and the Administration has indicated it will introduce a pro-competition bill before the end of this year.

Since this type health care delivery has at least some support from the Kentucky Department for Human Resources, as well as the Federal Government, it behooves the medical community of Kentucky to become familiar with the various proposals.

The competition type proposals make the assumption that given a monetary incentive and a choice, consumers would choose a health insurance plan with fewer benefits and would be willing to accept responsibility for some first-dollar health costs. As a result, individuals would be motivated to use fewer health care services and to seek out providers who are cost efficient.

Under such a program, all persons would be eligible to purchase health insurance from "qualified plans" whose premiums would be financed through employer contributions. Qualified plans might be governmental agencies, third party carriers, hospital medical staffs or groups of physicians; that is, any plan capable of delivering or paying for the delivery of health care. No plan would "qualify" unless it provided catastrophic coverage with a maximum limit out-of-pocket expense to an individual or family.

The employer would offer insurance programs with a uniform premium contribution. Persons choosing plans with a premium less than the amount contributed by an employer would keep the difference in tax free cash. Employees choosing plans costing more than the basic plan would make up the difference out of pocket. An employer would have the option of offering qualified plans or traditional third party coverage. However, in most instances, if the employer chose to offer traditional coverage, the tax deductibility for the premiums paid would be lost. If the qualified plan were chosen, the tax deductibility would be retained.

A highly possible result of such plans would be that sponsors of qualified plans, especially those with the more comprehensive plans, would be expected to exercise their purchasing power to control selection of providers and facilities through special arrangements with them. The availability of care to employees covered by the plan would be governed by such arrangements, with controls established to limit costs, and, thus, create a competitive advantage.

The arrangements might be through provider contracts, closed panel arrangements, negotiated fee

schedules and/or a greater reliance on large group practices where costs theoretically could be lowered through strict internal controls.

The cost of employee benefit programs in private industry may also make such plans attractive to employers.

While some studies have indicated that health costs are not a high priority with industry, others have indicated that costs of employee benefit plans are of major concern.

Some of the proposals before Congress would remove prohibitions against the corporate practice of medicine, remove requirements that various types of health care services be delivered only by specified professionals and remove provisions that require a hospital to have an organized medical staff with traditional staff privilege requirements.

A pro-competition trial balloon has been floating around Kentucky since early last spring. The Medical Market Model Plan for Kentucky was developed in the Kentucky Department for Human Resources and given wide distribution to health planning agencies, various departments of state government, health care providers, third party carriers and business, labor and consumer groups.

(DHR Secretary Stumbo has indicated that his department does not support the plan as written and will not pursue its implementation in its present form.)

The positive aspects of catastrophic coverage with flexibility in benefit levels in the medical market model are overshadowed by the more ominous segments of the plan such as the creation of more government agencies, limiting state employees to a choice among "qualified" plans, and the cost of implementation both to the government as well as the private sector. Administrative and operational costs are unknown and unprojected.

No one knows how any of these proposals will fare when exposed to the legislative process. However, federal and state resources to fund governmental medical services are limited and prospects of a change for the positive do not look good. Both national and state administrations are looking for ways to cut costs.

The current cap on Medicaid funding came with the assurance that restrictions on how these funds could be used will be eased. Several states, including Kentucky, have requested the Department of HHS in Washington to waive the freedom of choice mandate of the Medicaid law. If that occurs (and it is permissible under the new federal regulations), states would determine who would deliver services to Medicaid clients and where and how they would be delivered.



"Enrollment would basically be government run and persons could not enroll directly with a provider, but could enroll or change plans only through a bureaucratic agency."

The Medical Market Model, while similar to those plans outlined above, would also increase the role of state government, although it purports to lessen government regulation through the enhancement of what it terms free market competition. Two new regulatory boards would be set up under the plan and all utilization review and quality care assessment for qualified plans would be done through the State Center for Health Statistics.

Enrollment would basically be government run and persons could not enroll directly with a provider, but could enroll or change plans only through a bureaucratic agency.

Under the Medical Market Model, the concept would be phased in over a 10-year period. Initially, all state employees, state retirees, school teachers and federal employees would participate. Ultimately, Medicare and Medicaid recipients, as well as private employers, would be included.

The potential population that could be affected by the Medical Market plan and the many ramifications of any national plan that might be enacted, make the pro-competition concept one which will provide major challenges to organized medicine in the foreseeable future.

At the national level, the AMA has followed proposed legislation closely and has offered testimony to the effect that greater cost consciousness and individual responsibility in choosing insurance coverage are appropriate goals. However, there are accompanying dangers of rationing and lowering the quality of health care in such proposals.

It has not been proven that regulated "competition" in medical practice will decrease costs. Such a plan could cause a general increase in costs. The aura of reduced medical treatment and resultant bonus to the

insured will eventually run its course. Deferred treatment can ultimately double or triple initial costs of medical care and any savings realized initially would be quickly depleted. In addition, these plans tend to ignore basic actuarial methods, and would seemingly place a severe penalty on those who need medical care the most. Presently, most health insurance companies pool groups of individuals of all ages to spread the risk and equalize costs over the lifetime of the individual.

KMA has closely watched the control of these discussions at the state level through committees, the Board of Trustees, and the House of Delegates. Concerns have been recognized of blatant governmental regulation of health care, an unnecessary and radical restructuring of the health system, emphasis of one mode of health care over others and pre-emption of the role of the voluntary sector. These concerns will guide the Association's continuous scrutiny and reactions to "pro-competition" efforts.

Earl P. Oliver, M.D., Scottsville
Chairman, KMA Committee on Medical Insurance and Prepayment Plans

Postgraduate Opportunities

FEBRUARY

21-26 Thirteenth Family Medicine Review, Hyatt Regency Hotel, Lexington, KY

MARCH

8-10 Sixth National Nutrition in Pregnancy Seminar, University of Louisville, Health Sciences Center

24-27 International Conference on Occupational Lung Disease, Hyatt Regency Chicago, Chicago, IL

APRIL

22-24 Eighth Annual High Risk Pregnancy Management Course, Hyatt Regency, Louisville, KY

MAY

5-8 63rd Annual Meeting of the Virginia Society of Ophthalmology & Otolaryngology, Inc., Williamsburg Conference Center, Williamsburg, VA

14-15 Vitrectomy Course, University of Louisville, Health Sciences Center

20 Allergy-Immunology Update, Hyatt Regency, Louisville, KY

20-22 Adolescent Gynecology, Hyatt Regency, Louisville, KY

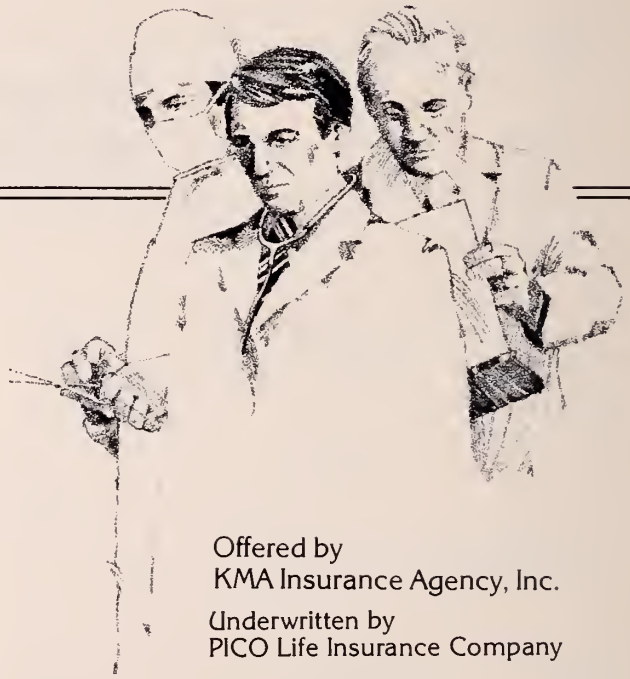
JUNE

13-18 Seventh Annual Family Medicine Review, Galt House, Louisville, KY

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA

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Competition Legislation Spawns Confusion

Much has been said lately about health care competition proposals, both written and orally, at state and national levels. The so-called "pro-competition" plans are supposedly designed to give individuals a wide choice of health plans, a financial reward for choosing cheaper plans with fewer benefits and to entice the consumer to use fewer health services as well as to seek out the most cost efficient providers.

Members of the KMA House of Delegates, at their September meeting, voiced considerable concern at this new approach to changing the health care delivery system which evidently received the blessing of President Reagan's administration and is spreading to the states, including Kentucky. The delegates asked that the entire membership be apprised of the push for such legislation and an article appears on Page 33 which merits your attention.

Some concerns of KMA and the AMA evolve around an individual's freedom of choice of health care provider, the potential effect of rationing or lowering the quality of health care, increased regulation of health care, and giving preferential treatment to certain modes of delivery of health care.

To this author, pro-competition would create a maze so complicated that few individuals could be trained to find their appropriate health care coverage. It merits and will receive a continuing close monitoring by KMA.

Robert G. Cox
Executive Editor

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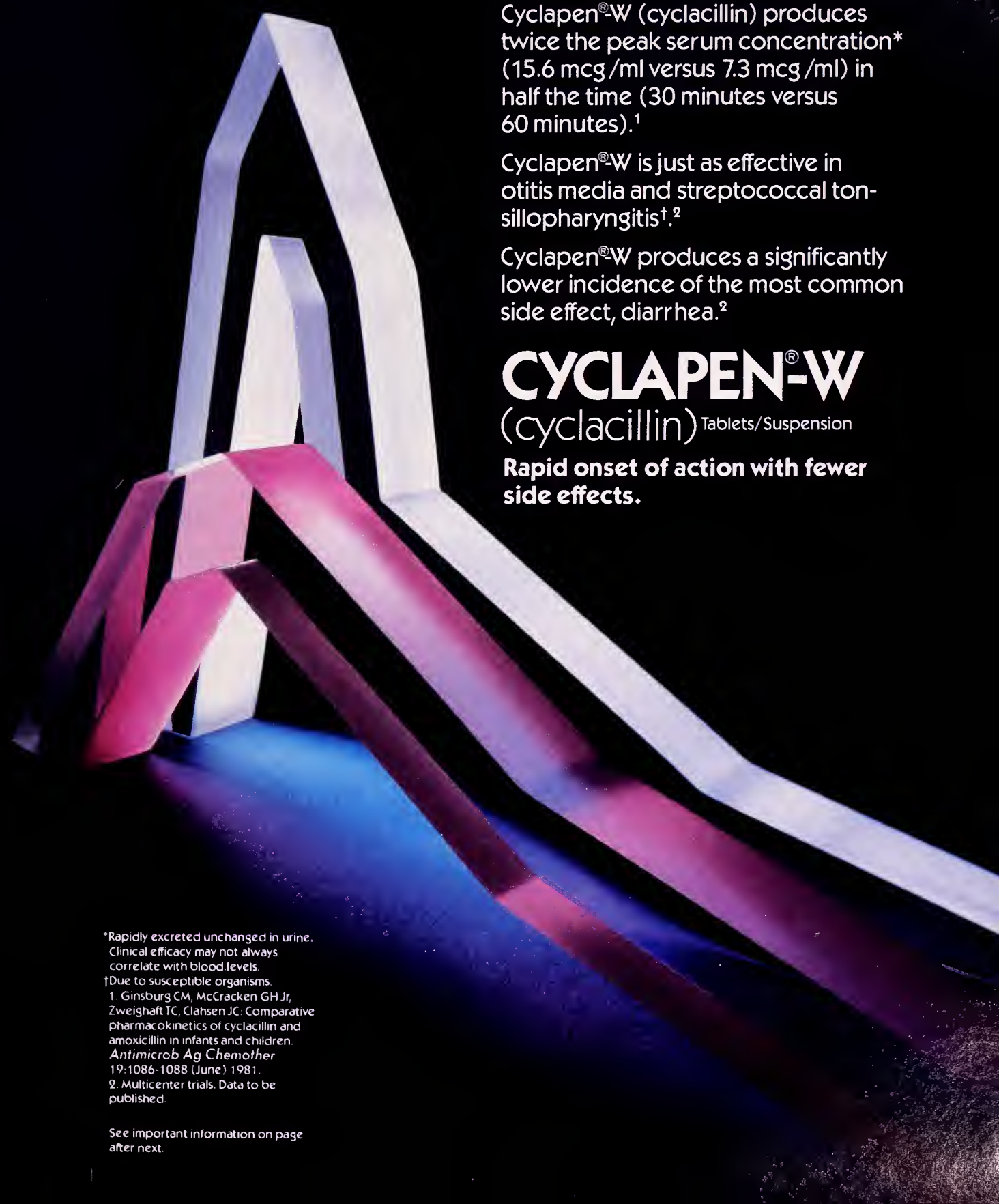
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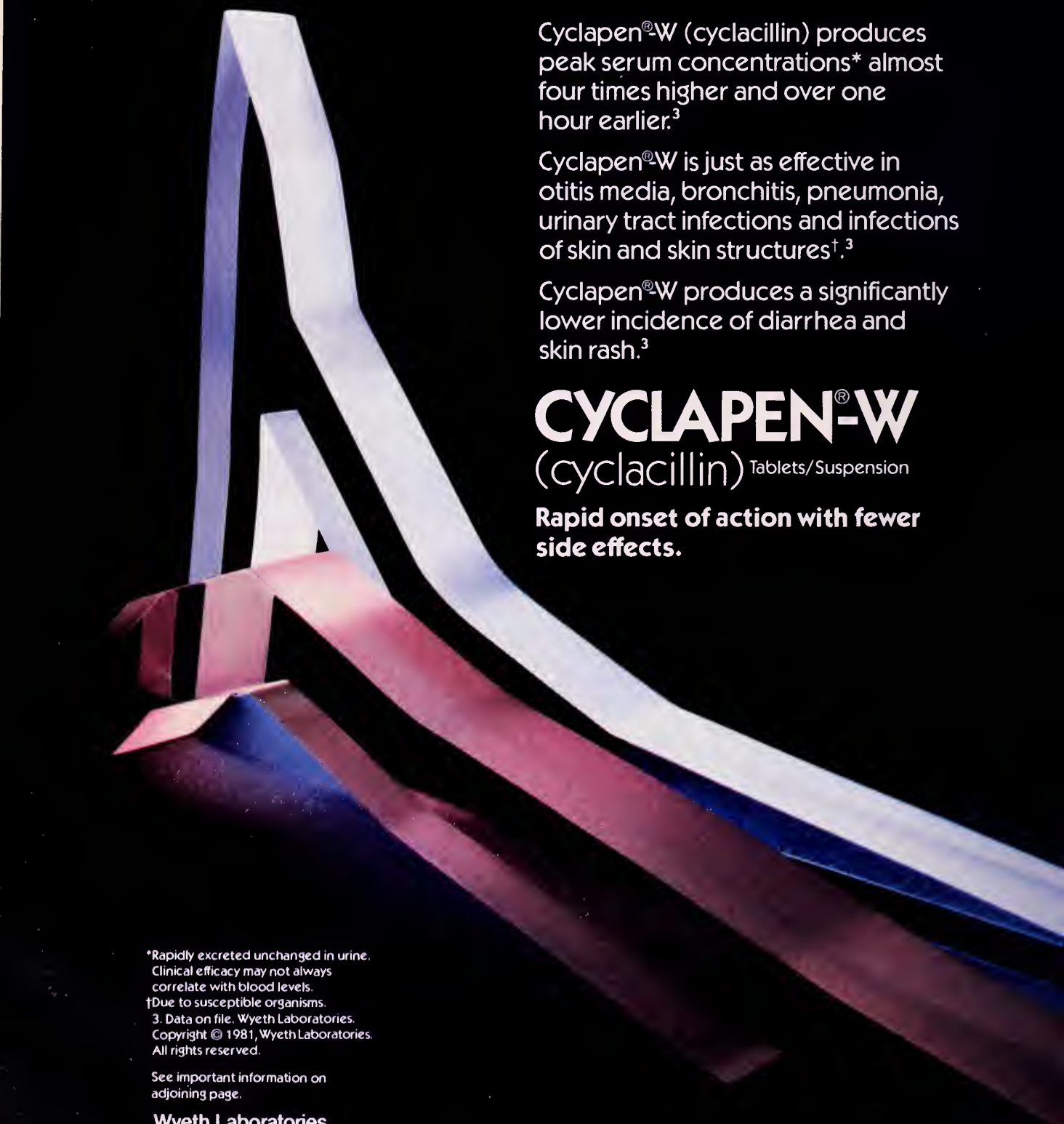
1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

Compared to ampicillin

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Cyclapen®-W (cyclacillin) produces peak serum concentrations* almost four times higher and over one hour earlier.[3]

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†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

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Cyclapen®-W (cyclacillin)

Indicotions
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indicotions: Treatment of the fallawing infectians:

RESPIRATORY TRACT
- Tansillitis and pharyngitis caused by Group A beta-hemalytic streptacacci
- Branchitis and pneumonio caused by S. pneumoniae (farmerly *D.* pneumaniae)
- Otitis media caused by S. pneumoniae (farmerly *D.* pneumaniae) and *H. influenzae*
- Acute exacerbatian af chronic branchitis caused by *H. influenzae**

*Thaugh clinical improvement has been shawn, bacterialagic cures cannat be expected in all patients with chranic respiratary disease due ta *H. influenzae.*

SKIN AND SKIN STRUCTURES (integumentary) infectians caused by Graup A beta-hemalytic streptacacci and staphylacacci, nonpenicillinase praducers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis.* (This drug shauld nat be used in any *E. coli* and *P. mirabilis* infectians ather than urinary tract.)

NOTE: Perfarm cultures and susceptibility tests initially and during treatment ta monitor effectiveness af therapy and susceptibility af bacteria. Therapy may be instituted priar ta results of sensitivity testing.

Contraindications Cantraindicated in individuals with history of an allergic reactian ta penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less *in vitro* activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolanged use af antibiotics may promote avergrawth af nansusceptible argonisms. If superinfection occurs, take apprapriote measures.

PREGNANCY: Pregnancy Categary B. Reproduction studies perfarmed in mice and rats at dases up to 10 times the human dose revealed no evidence af impaired fertility or harm to the fetus due to cyclacillin. There are, however, na adequate and well-controlled studies in pregnant women. Because animal reproductian studies are nat always predictive af human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is nat knawn whether this drug is excreted in human milk. Because many drugs are, exercise cautian when cyclacillin is given ta a nursing waman.

Adverse Reactions Oral cyclacillin is generally well talerated. As with other penicillins, untaward sensitivity reactians are likely, particularly in those wha previausly demanstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, ar urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vamiting (in approximately 1 in 50), and skin rash (in appraximately 1 in 60). Isalated instances af headache, dizziness, abdaminal pain, vaginitis, and urticaria have been reparted. (See WARNINGS) Other less frequent adverse reactions which may occur and are reparted with ather penicillins are anemia, thrombacytapenia, thrombocytapenic purpura, leukapenia, neutrapenia and easinaphilia. These reactians are usually reversible an discantinuatian af therapy.

As with ather semisynthetic penicillins, SGOT elevations have been reported.

As with antibiatic therapy generally, continue treatment at least 48 ta 72 haurs after patient becames asymptomatic or until bacterial eradicatian is evidenced. In Graup A beta-hemalytic streptacaccal infectians, at least 10 days' treatment is recammended to guard against risk af rheumatic fever or glomerulanephritis. In chronic urinary tract infectian, frequent bacterialagic and clinical appraisal is necessary during therapy and passibly for several months after. Persistent infection may require treatment far severol weeks.

Cyclacillin is not indicated in children under 2 months af age.

Patients with Renal Failure Cyclacillin may be safely administered ta patients with reduced renal function. Due ta pralanged serum half-life, patients with various degrees af renal impairment may require change in dasage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tansillitis & Phoryngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Branchitis and Pneumania		
Mild or Moderate Infectians	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chranic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 ta 100 mg/kg/day†
Skin & Skin Structures	250 mg ta 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dasage should not result in a dose higher than that far adults.
†depending on severity

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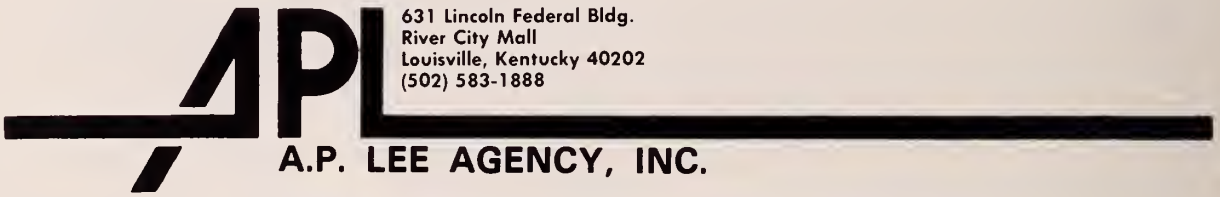
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Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA Office: 502-459-9790. Or call one of the committee members listed below.

David L. Stewart, M.D. Louisville, (502) 456-1891
Daniel W. Burke, M.D., Louisville, (502) 584-2421
Keene M. Hill, M.D., Horse Cave, (502) 786-2372
Thomas R. Miller, M.D., Lexington, (606) 277-9755
Charles Nichols, M.D., Pikeville (606) 432-0191
James F. Rozelle, M.D., Hopkinsville, (502) 886-5163
Nat H. Sandler, M.D., Lexington, (606) 278-7811
Bruce A. Snider, M.D., Crestview Hills, (606) 341-5014

LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

This letter is in reference to the article by Dr. Nagaraj et al., entitled "Traumatic Extubation With Laryngotracheal Injury" in the October issue of the *Journal of the Kentucky Medical Association.* Although the outline of the case history is sketchy, there are some aspects of the discussion and particularly some of the conclusions therein that may be misleading in terms of laryngotracheal injuries.

I would agree that injuries to the larynx and trachea have not been reported as a complication of self-extubation. Indeed, it is most difficult to explain how the first and second tracheal rings could be fractured upon extubation, even with an inflated cuff, considering the cartilage is very compliant in an adolescent. It is much more likely that the "intubation without incident" may well have been very significant, in that it may have resulted in laceration of the true cord, and fracture of the tracheal rings. However, it is far more likely that this case represents the typical laryngotracheal injury which commonly goes undiagnosed for a period of time as the patient is worked up for what may often be more immediately demanding problems.

However, any otolaryngologist can give both anecdotal and documented case histories in which significant laryngotracheal injury occurred without any external evidence of trauma to the neck whatsoever.

Furthermore, I would question how cuff over-distention can be shown radiographically. Also, although subcutaneous emphysema would normally be apparent soon after the time of injury to the larynx or trachea, such is not always the case. Some patients present only with mild dysphonia or perhaps pain in the neck or facial area, but no subcutaneous emphysema and possibly not immediate airway obstruction. However, deterioration of the airway in patients with laryngotracheal injury can be precipitous.

In summary, I would question the accuracy of the diagnosis of injury from self-extubation. The anatomy of this area does not really permit this conclusion and this article may be looking at the problem backwards.

In any case, where there is a question of damage to the larynx and trachea, consultation with an otolaryngologist should be sought as expeditiously as possible.

I hope these comments might prevent a possible misinterpretation of the clinical picture in such cases.

J. Douglas Knoop, M.D.
Lexington Clinic

PROFILE

Carl Cooper Jr., M.D. Chairman, State Legislative

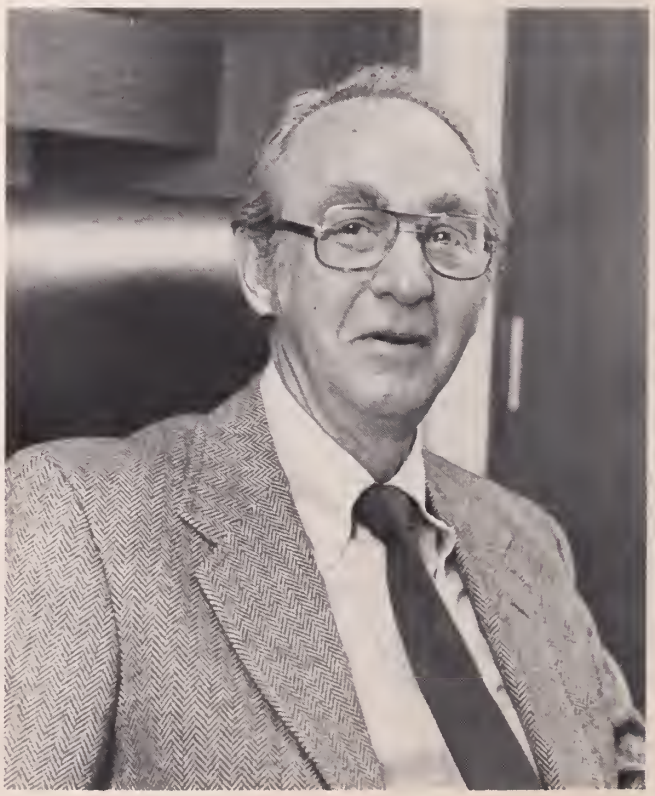
THE Kentucky General Assembly will convene on January 5, 1982, with approximately 1600 legislative proposals to consider. About 12% of these proposals will relate to medical issues or issues that may affect the medical profession.

Expecting physicians to be sufficiently familiar with each of these proposals to be effective in contacting legislators is unrealistic. It is imperative though that the medical profession be represented by a spokesperson who can help guide the direction of legislation.

Carl Cooper, Jr., M.D., Bedford, is Chairman of the State Legislative Activities Committee. His role is to supervise the activities of the Legislative Committee and KMA lobbyists and work directly with Kentucky legislators. Acting as spokesperson for KMA is not a new role for Doctor Cooper. He has been active in KMA since 1953 when he began his family practice in Bedford, Kentucky. He became President of KMA in 1978. In the interim he has served as a member of the Board of Trustees, Delegate and alternate Delegate to the AMA, Director of Kentucky Educational Medical Political Action Committee (KEMPAC), and Vice Speaker and Speaker of the KMA House of Delegates.

Doctor Cooper's expertise in matters of organized medicine does not mean that Kentucky physicians can rely solely on him and the Committee to deal with the politicians. Doctor Cooper quickly points out, "We depend on the individual physician of a particular community or area, along with our key men, to talk to the legislators and try to influence them directly. This carries the most impact."

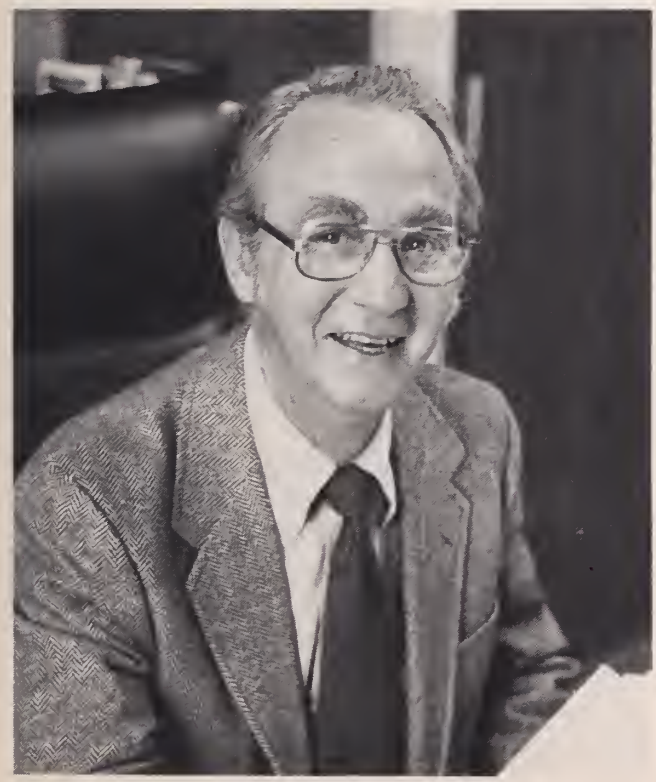
Individual participation by physicians is increasing according to Doctor Cooper. "I think people are beginning to see the impact of our work, particularly through KEMPAC. We feel we have been very successful. There is a lot more work to do but we are becoming more effective through our experience."

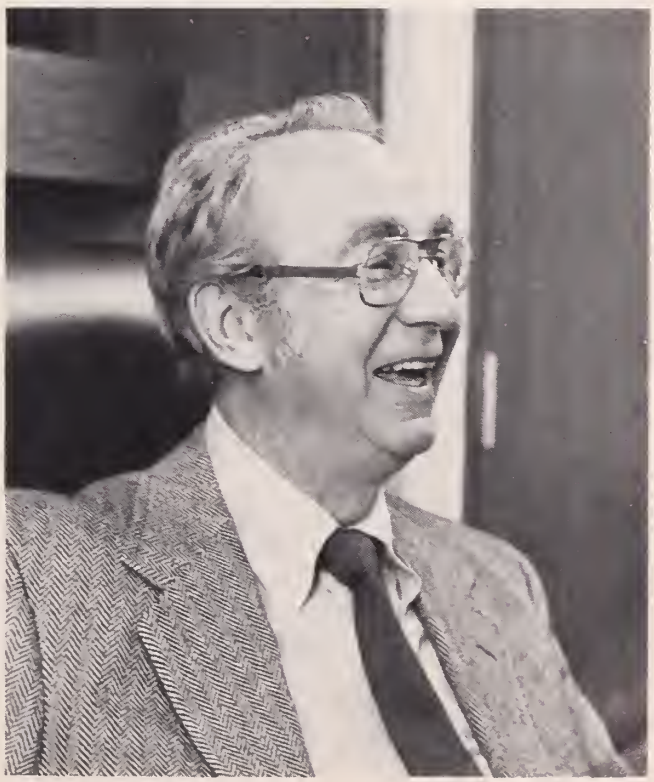


Activities Committee

Talking with Doctor Cooper is an experience indeed. His conversation is lively and animated. He embellishes stories with his own special anecdotes. This is not to say that the conversations are one-sided. Doctor Cooper listens as well as he converses. This penchant toward the art of conversation—to be interested as well as interesting—probably explains Doctor Cooper's effectiveness in relaying physicians' concerns directly to legislators. One of these concerns is the image of physicians still held by some. Doctor Cooper explains, "Until recently, we have been perceived as being interested in those things beneficial to physicians. We have had a hard time convincing legislators that we are interested in what is good for the patient."

The specific medical and health related issues that will be considered in the 174th meeting of







the Kentucky General Assembly are distinct from those in the past. Yet, the source of these problems often remains the same. Most involve inroads into the practice of medicine, either from government or paraprofessional medical groups. Doctor Cooper explains what must be watched closely during the General Assembly, "With the present administration's tight purse string policy and with block grant programs replacing categorical grants we are going to see many changes in the administration of health care policies. We in organized medicine feel it is not fair to enlarge upon programs encompassed by Medicare and especially Medicaid without adequate recognition of physicians first." Doctor Cooper continues, "We may tend to think of all these problems as being local, but they are not. When we go to different legislative conferences, particularly AMA's, we find everyone faces them and they all originate from the same source. It took me a long time to realize this. Whatever problems we have locally with paraprofessionals or government it is also a problem nationally."

National medical concerns are the reason that support of KEMPAC and the American Medical Political Action Committee (AMPAC) are so important says Doctor Cooper. In the past, physicians have had the reputation of avoiding politics. This is changing according to Doctor Cooper. "A lot of progress has been made and this can be seen from the sustaining membership in our PAC movement, but there is still a great deal of work to be done. I think the promotion of taking an active role in politics needs to be started in medical school. Physicians need to realize that medicine is not only a science and art but has become political as well. It is political because we are all under the control of politics in some way. Unless we are successful in educating our legislators to good policies then we are going to get bad legislation."

While the legislature is in session Doctor Cooper will be spending at least one day a week in Frankfort with the Quick Action Committee, and possibly more time depending on his attendance at various legislative committee meetings.

At this time Doctor Cooper is hesitant to say how difficult this session will be for physicians. "With the changes that have taken place recently, such as the death of Bill Kenton, and with many of the legislators being neophytes, we may have to re-educate those coming into the legislature as to the sincerity of our programs. Also we have had no indication from Governor Brown about specific pieces of legislation so we will have to work more with individual legislators who work in their own direction."

Doctor Cooper's family is certainly the high point in his life. His oldest son, Greg, is a family physician in Cynthiana and father of Doctor Cooper's five-month-old grandson, James Curtis Matthew Cooper. As Doctor Cooper describes him, "He's the smartest and best looking boy you have ever seen."

Doctor Cooper's younger son, Jim, is working for the National Marine Fishery in Hawaii and is beginning a program toward a master's degree in computer science.

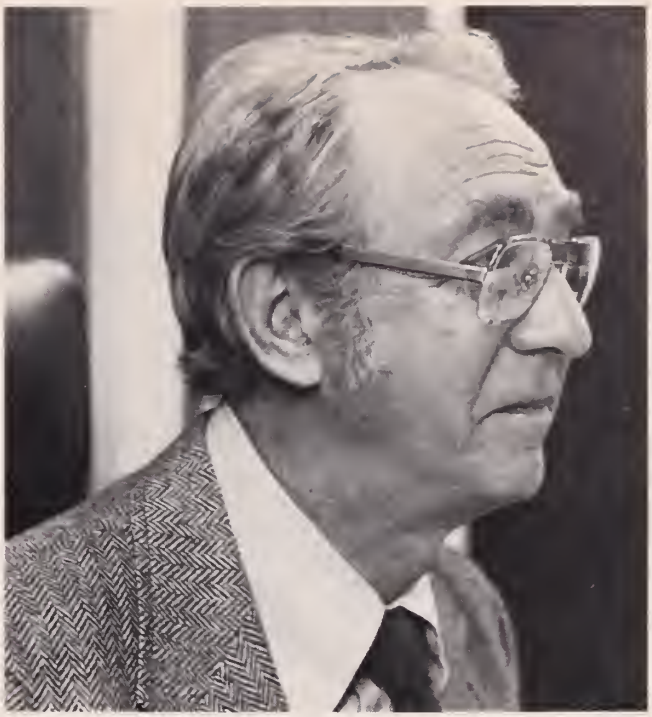
In 1948, Doctor Cooper married Virginia Wright Hoge, daughter of M. E. Hoge, M.D., Jackson, Kentucky. Mrs. Cooper is involved in church activities and according to her husband is a full-time caretaker.

Doctor Cooper's favorite hobby is fishing for muskie at Witch Bay Camp in Ontario. He and his family have been visiting there since 1955. He recently caught his biggest muskie (maybe the devil did that for him) weighing 27 pounds. He is having it mounted and may hang it in his office.

When Doctor Cooper started practice in 1953, he was the only physician in Trimble County. "I was automatically a delegate and since 1953 I have remained a delegate as well as many other

things in the Kentucky Medical Association. It was and continues to be a big part of my life. I enjoy it. It's one of my hobbies. I feel it is very important that doctors take an active part in organized medicine and I think it is valuable not only to the physician personally but to his profession. We need to have more doers and less fussers. Or maybe more fussers and more doers."

Text and Photographs by Donna M. Young



Headquarters Activity

JANUARY

1 New Year's Day, Office Closed
5 General Assembly Convenes, Frankfort
6 Judicial Council, Louisville
12 *Journal* Editors, Louisville

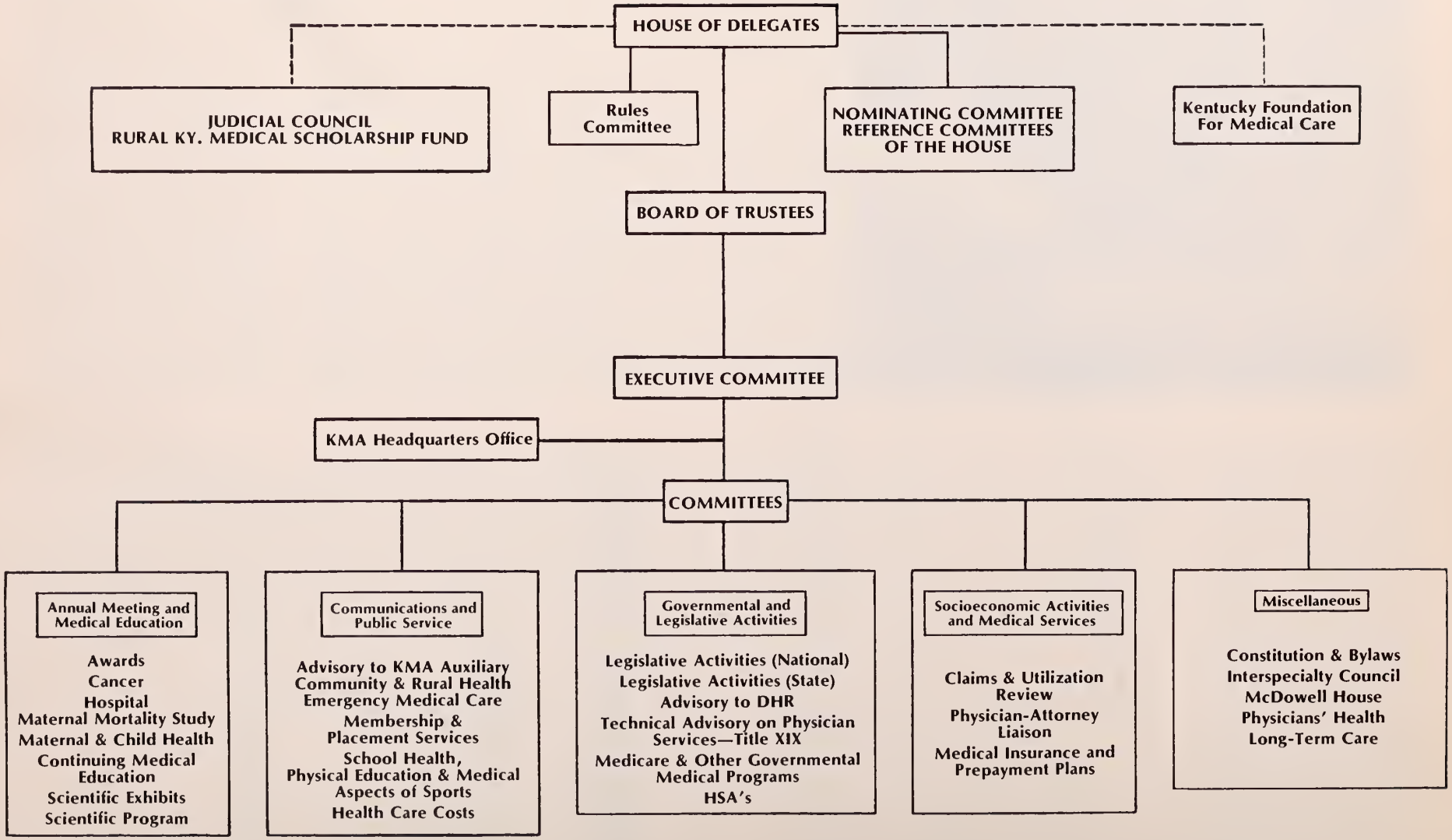
FEBRUARY

9 *Journal* Editors, Louisville

APRIL

7 & 8 KMA Board of Trustees
13 *Journal* Editors, Louisville
21 Membership Committee, Louisville

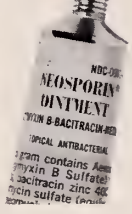
KMA Organization Chart—Revised November 1981



First Class First Aid



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- Handy applicator tip



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INDICATIONS: *Therapeutically* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically* the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

Wellcome / **Burroughs Wellcome Co.**
Research Triangle Park
North Carolina 27709

Motrin® vs aspirin w/codeine...
(ibuprofen)

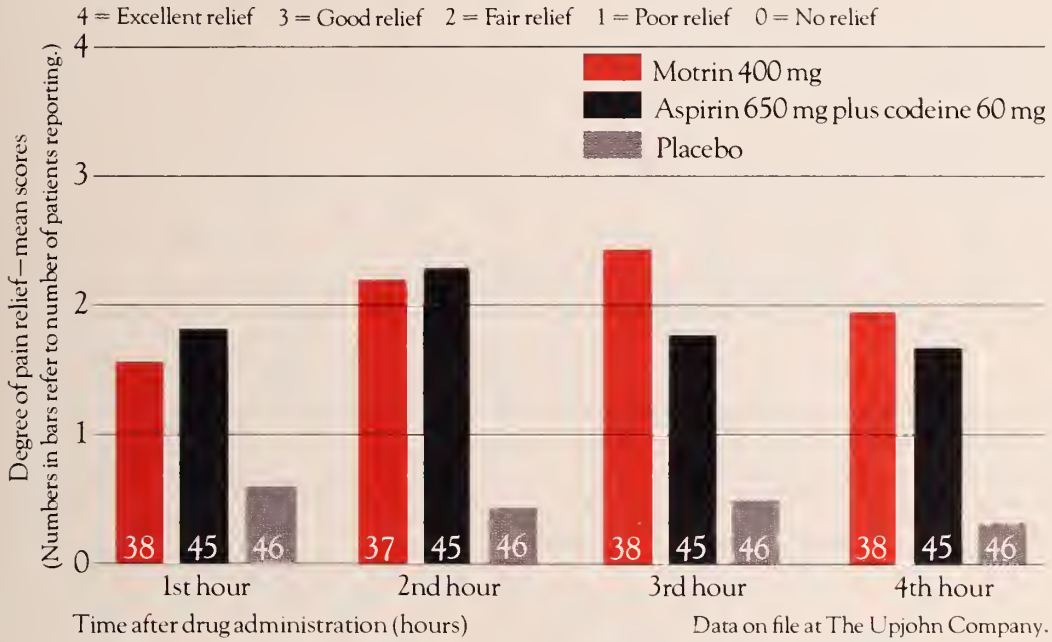


©1981 The Upjohn Company

compare the analgesic effect

A *Motrin* 400 mg dose relieved postsurgical dental pain as effectively as a combination of 650 mg aspirin and 60 mg codeine (two aspirin-with-codeine No. 3 tablets) in a study of 129 patients. In this double-blind, placebo-controlled, randomized study, no statistically significant difference in relief of pain was noted at 1, 2, and 4 hours between the *Motrin* and aspirin-with-codeine groups... with *Motrin* being significantly more effective ($p = 0.03$) at the three-hour interval. Active treatment was significantly more effective ($p < 0.0001$) than placebo at all time intervals.

Comparison of pain relief
Motrin vs aspirin-codeine combination



Data on file at The Upjohn Company.

One tablet q4-6h prn
For relief of mild to moderate pain:

Motrin® 400 mg TABLETS
ibuprofen, Upjohn

• Not a narcotic • Not addictive • Not habit forming • Nonscheduled • Acts peripherally • Relieves pain rapidly • Relieves inflammation • Indicated in acute and chronic pain • Well tolerated (The most common side effect with *Motrin* is mild gastrointestinal disturbance.)

Please turn the page for a brief summary of prescribing information.

Upjohn

Motrin® (ibuprofen) now proved an effective analgesic for mild to moderate pain

Motrin® Tablets (ibuprofen, Upjohn)

Indications and Usage: Relief of mild to moderate pain.

Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

Contraindications: Individuals hypersensitive to it, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory agents (see WARNINGS).

Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be tried. If Motrin must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin; use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin*: Used concomitantly may decrease Motrin blood levels. *Coumarin*: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy nor by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,* epigastric pain,* heartburn,* diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,* headache, nervousness. **Dermatologic:** Rash* (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400, or 600 mg t.i.d. or q.i.d. Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

Caution: Federal law prohibits dispensing without prescription.

For additional product information, see your Upjohn representative or consult the package insert.

Upjohn THE UPJOHN COMPANY
Kalamazoo, Michigan 49001 USA

MED B-4-S

J-8260-4

MARCH 1981

It's time we took arthritis seriously.

It's a myth that arthritis is just the minor aches and pains of old age. It's a major crippler that attacks. Anybody. Anytime. 31 million Americans have it. There are almost a million new cases a year. And six out of ten are under 60. Symptoms can come and go for years. So if you don't know the warning signals, find out. If you'd like information that could help you—or you'd like to help us—write to the Arthritis Foundation, Box 19000, Atlanta, GA 30326.

ARTHRITIS FOUNDATION

ASSOCIATION NEWS

KEMPAC Board of Directors elects officers for 1981-1982. At the Annual Meeting of the KEMPAC Board of Directors held November 19, 1981, the following officers were elected:

John W. Harrison, M.D., Chairman
Sam D. Weakley, M.D., Vice Chairman
James S. Brashear, M.D., Treasurer
Edward C. Shrader, M.D., Assistant Treasurer
Raymond J. Timmerman, M.D., Secretary

Listed below are the KEMPAC Board of Directors:

First Congressional District
James S. Brashear, M.D.—Box 469, Central City, KY 42330
John D. Noonan, M.D.—2018 Broadway, Paducah, KY

Second Congressional District
(Democrat to be named.)
M. A. Douglas, Jr., M.D.—Magnolia, KY 42757

Third Congressional District
Edward C. Shrader, M.D.—Suburban Medical Plaza, 4-E, Louisville, KY 40207
Sam D. Weakley, M.D.—103 Baptist East Doctors Bldg., Louisville, KY 40207

Fourth Congressional District
Raymond Timmerman, M.D.—800 Alexandria Pike, Ft. Thomas, KY 41075
Thomas R. Watson, M.D.—Suburban Medical Plaza, Louisville, KY 40207

Fifth Congressional District
P. Bruce Barton, M.D.—Doctors Park, Corbin, KY 40701
William G. Clouse, M.D.—Bel Air Drive, Richmond, KY 40475

Sixth Congressional District
Allen E. Grimes, Jr., M.D.—135 E. Maxwell St., Lexington, KY 40508
William P. McElwain, M.D.—Scholfield Lane, Frankfort, KY 40601

Seventh Congressional District
John W. Harrison, M.D.—Rt. 4, Box 93, Ashland, KY 41101
Harvey A. Page, M.D.—Pikeville Medical Clinic, Pikeville, KY 41501

Represent Auxiliary to KMA
Mrs. Marcus Dillon (Edith)—333 Braemer Drive, Lexington, KY 40502
Mrs. James W. Davis (Barbara)—1604 Sylvan Way, Louisville, KY 40205
Mrs. Paul E. Lett (Glenna)—4551 Brenda Drive, Ashland, KY 41101
Mrs. N. H. Talley (Shirley)—110 E. Washington St., Princeton, KY 42445

Exofficio Members
Donald C. Barton, M.D.—1014 Circle Dr., Corbin, KY 40701
Carl Cooper, Jr., M.D.—Bedford, KY 40006
Hoyt D. Gardner, M.D.—Suite 304, Baptist East Doctors Building, Louisville, KY 40207
Wally O. Montgomery, M.D.—3690 Marlborough Way, Paducah, KY 42001
John C. Quertermous, M.D.—205 Eighth St., Murray, KY 42071
C. Kenneth Peters, M.D.—1911 Hurstbourne Circle, Louisville, KY 40220
Fred C. Rainey, M.D.—912 Woodland Drive, Elizabethtown, KY 42701

The KEMPAC Board of Directors encourages its membership to participate in political activity and invites your concerns.

MEMBERS IN THE NEWS

Honors Bestowed

The following KMA members have obtained the AMA Physician Recognition Award. These physicians were honored for accumulating 150 hours of continuing medical education credits during the past three years.

C. R. Bautista Acosta, M.D., Barbourville
Stephen Randall Adcock, M.D., Louisville
Joseph Charles Allegra, M.D., Goshen, KY
Mohammad Amin, M.D., Louisville, KY
Sarita Dewan Bansal, M.D., Harrodsburg
James Mathis Barr, M.D., Frankfort
Branham B. Baughman, M.D., Frankfort
Jack Dean Bland, M.D., Henderson, KY
William Kemper Burkhart, M.D., Lexington, KY
Robert Herriott Bush, M.D., Mount Sterling
Charles Edward Caldwell, M.D., Florence, KY
Jeffrey Phillip Callen, M.D., Louisville
Walter Elliott Cowan, M.D., Hazard, KY
Matthew C. Darnell, M.D., Lexington, KY
William Stuart Eads, M.D., Corbin
Ronald B. Faulkner, M.D., Radcliff, KY
James Denzil Frederick, M.D., West Liberty, KY
Michael Sylvester Graff, M.D., Lexington, KY
Bill H. Harris, M.D., Lexington, KY
Harold Chester Haynes, M.D., Lexington, KY
Richard Frank Hench, M.D., Lexington
John Moser Johnstone, M.D., Berea
Gerald E. Kakascik, M.D., Paducah
William Henry Klompus, M.D., Madisonville, KY
Sam Irwin Krinsky, M.D., Louisville, KY
John Edward Kuhn, M.D., Shively, KY
James H. Lambert, M.D., Madisonville
John H. Leland, M.D., Crestwood
John A. Logan, M.D., Henderson, KY
Robert Joseph McCabe, M.D., Newport
Tom Oak McGuire, M.D., Pikeville, KY
Owen Silas Ogden, M.D., Louisville, KY
Marguerite Mary Purcell, M.D., Lexington, KY
Felipe A. Rubgio, M.D., Louisville, KY
Bernard Franklin Sams, M.D., Louisville
Robert Johns Salisbury, M.D., Mount Sterling
Robert Patrick Schiavone, M.D., Louisville, KY
James Allen Schroer, M.D., Newport, KY
Philip Bernard Schworer, M.D., Florence, KY
Ellsworth Carl Seeley, M.D., Lexington, KY
Charles Byrne Severs, M.D., Valley Station, KY
Frank K. Sewell, M.D., Harrodsburg, KY
Charles Joseph Shipp, M.D., Greenville, KY
John Woodrow Simmons, M.D., Monticello, KY
Arthur Sitelman, M.D., Covington, KY
Allen L. Sklar, M.D., Lexington, KY
Lang Smith, M.D., Middlesboro
David L. Stewart, M.D., Louisville, KY
Dorothy Jean Twellman, M.D., Manchester
Robert Harold Wilber, M.D., Lebanon, KY
James Oswald Willoughby, M.D., Bowling Green, KY
Hylan Hale Woodson, M.D., Greenville, KY

CLASSIFIED

ORTHOPAEDIC SURGEON. Newly established and rapidly expanding Orthopaedic practice has opening for third Board certified or eligible surgeon. Spinal surgery interest a definite asset, with large industrial potential. Location in Western Kentucky, with fabulous living and recreation potential. Financial incentives negotiable. Not a "clinic" setting. For information contact: Stuart Poston, Murray-Calloway County Hospital, 803 Poplar, Murray, Ky. 42071.

EMERGENCY PHYSICIANS $80,000-$90,000. Medical Associates, Inc. is actively seeking new emergency room contracts and is in need of additional full time physicians both now and for the future in Kentucky. Full time positions will have a yearly compensation of $80,000 to $90,000. Currently, we also are interviewing candidates for directorships with the group. Annual compensation will be in the $100,000 range. If you are interested in one of these positions, call Paul T. Brizendine, M.D. or Frank H. Poschinger at 606-638-9663 or write to Medical Associates, Inc., P.O. Box 729, Louisa, Kentucky 41230.

FAMILY PHYSICIAN, to permanently join two established physicians with a large practice in Middletown (Suburban Louisville). Modern office, full staff, including registered nurses, medical technologist, and x-ray facilities. Twenty minutes to hospital with open staff. Call 502-245-4168 or write Dr. Holmes and Johnson, 11518 Main Street, Middletown, Kentucky 40243.

PEDIATRICIAN NEEDED in Glasgow, Ky.—immediate office space, 200 bed hospital within 1000 feet, salary and fringe benefits for two years, then full partnership, Call collect—Day 502-651-9755 or night 502-678-1407.

FOR RENT

NAPLES FLORIDA, spectacular waterfront view, 3 bedroom, 2 bath condominium, elegantly furnished, tennis, pool, boating, children welcome. Weekly, monthly and seasonal rentals. Contact D. Kelly M.D. (606) 266-5674.

Annual Report Kentucky State Board of Medical Licensure

During the past year the Board held six day-long meetings and dealt with a variety of subject matter. At these meetings over 700 applications for medical and osteopathic licensure were reviewed and approved. This year the Board initiated a drug follow-up program involving physicians in the state with known drug problems. The initial reception has been good and it is the intention of the Board to continue the program in the future. In addition, the Board dealt with a number of paramedic matters since it is the administrator of the state paramedic program. The Board has been working with the Nurse Practice Council in an attempt to draft regulations relating to the use of the advanced registered nurse practitioner by the practicing physician.

Disciplinary proceedings continue to demand much of the Board's attention at its meetings. Over the year the Board has found it necessary to initiate charges against 17 physicians' licenses. This action has resulted in four licenses revoked, one suspended, six placed on probation with various terms and conditions, and two licenses retired at the request of the Board. Also, during the year 12 physicians appeared before the Board to answer questions relating to their medical practice.

In regards to disciplinary action, this completes the first year in which the Attorney General's office has provided legal services to the Board. Based on the work rendered to date, the Board has been pleased with the quality of service provided. Legal assistance has been readily available and all requests have been handled promptly and efficiently.

As noted earlier in this report, the Board has approved a regulation establishing guidelines for the utilization of the advanced registered nurse practitioner by physicians. The regulation is a culmination of three years work with the Nurse Practice Council in which three Board members serve. The regulation attempts to set guidelines for physicians to follow in their use of the advanced nurse practitioner. The proposed regulation will now be sent to the Legislative Research Commission for their consideration.

The Board's Paramedic Advisory Committee has also been active during the year holding eight meetings. This Committee was appointed by the Board in 1978 to assist in dealings with the administration of the paramedic program in the state. Over the year, acting on recommendations from the Advisory Committee, the Board approved four paramedic classes, certified 82 new paramedics and recertified 30 others. The state paramedic program continues to function on an active level although federal and state funding has been curtailed in the past year. The Board, through its Advisory Committee, continues to maintain an excellent and viable program in the state with emphasis on strong medical control.

A look at the activities of the medical licensure office for the year shows 4,947 licenses registered by physicians practicing in the state. Over the same period 620 new medical licenses were issued. Also, 292 temporary permits to practice medicine were issued and 38 limited medical licenses were renewed. The state medical examination was given in December and June to candidates seeking licensure in the state. Preparations are now under way for the 1982 *State Medical Directory*. This publication will be available in January.

On the national level the Federation of State Medical Boards, of which this Board is a member, is proposing a new state licensure examination concept known as the FLEX I and FLEX II. As now proposed all medical graduates will be required to pass an examination prior to entering their first year of post-graduate training. Upon completion of their first year of training, they would then be eligible to take the second portion of the exam. Upon passing they would then be granted a full license. If this concept is adopted, it will apply to both U.S. and foreign graduates and will eliminate the National Board examination as a licensing exam. The purpose of the two-exam concept is to establish a uniform examination for licensure. The Board has expressed some concern over this concept and plans to monitor its progress. This concludes my report on some of the many activities the Board has been involved with during the past year. As its President, I would like to thank each Board Member for his contribution and giving so freely of his time to serve on the Board.

John C. Quertermous, M.D.
President

MEMBERS IN THE NEWS

New Members

ADAIR COUNTY
Nichols Birlew,, M.D., Columbia

BOURBON COUNTY
Robert S. Berman, M.D., Paris

BOYD COUNTY
Muhammad R. Akhtar, M.D., Ashland
Ray Kleykamp, M.D., Ashland

FAYETTE COUNTY
James Apesos, M.D., Lexington
R. Ritchie Van Bussun, M.D., Lexington
Ralph D. Caldroney, M.D., Lexington
Kathleen M. Coordes, M.D., Lexington
Allen L. Cornish, III, M.D., Lexington
Jack W. Geren, D.O., Lexington
Robert P. Granacher, Jr., M.D., Lexington
Andrew H. Henderson, III, M.D., Lexington
Eunice Louise Johnson, M.D., Lexington
Janet H. Jones, M.D., Lexington
Martin J. Luftman, M.D., Lexington
Sandra L. Riegler, M.D., Lexington
Edwin L. Rogers, M.D., Lexington
Herbert H. Spencer, M.D., Lexington
Sharon E. Wells, M.D., Lexington

FRANKLIN COUNTY
Robert W. Young, M.D., Frankfort

HARRISON COUNTY
James R. Allen, M.D., Cynthiana

HENDERSON COUNTY
Alan H. Johnson, M.D., Henderson

HOPKINS COUNTY
Scott Gaines, M.D., Earlington

JEFFERSON COUNTY
Joseph T. Bilotta, M.D., Louisville
Sajal K. Bose, M.D., Louisville
Charles T. Brice, M.D., Chattanooga, TN
Roy P. Germano, Jr., M.D., Louisville
Richard A. Gould, M.D., Louisville
Roger D. Grider, M.D., Louisville
David C. Haas, M.D., Louisville
C. J. Havelda, M.D., Louisville
Martha K. Heyburn, M.D., Louisville
Suzanne M. Hite, M.D., Louisville
Hilda J. McGee, M.D., Louisville
J. E. McKiernan, Jr., M.D., Louisville
Lee Wm. McLain, Jr., M.D., Louisville
Serge A. Martinez, M.D., Louisville
Kantibhai S. Patel, M.D., Louisville
S. F. Stephenson, M.D., Louisville
Ina L. Tonkin, M.D., Memphis, TN
George S. Webb, M.D., Jacksonville, FL

KENTON COUNTY
Eugene Burchell, Jr., M.D., Erlanger
Joel Kreilein, M.D., Erlanger

McCRACKEN COUNTY
Gary T. England, M.D., Paducah
Roberta L. England, M.D., Paducah

MARION COUNTY
Brian F. Scott, M.D., Lebanon
A. Arthur Steele, M.D., Lebanon

MONTGOMERY COUNTY
L. William Roberts, M.D., Mt. Sterling

MORGAN COUNTY
Mike Burton, M.D., Mt. Sterling

NELSON COUNTY
M. Douglas Gossman, M.D., Bardstown

PULASKI COUNTY
John Harrison, M.D., Somerset

TRIMBLE COUNTY
Roderick H. MacGregor, M.D., Bedford

WARREN COUNTY
Lynn Olson, M.D., Bowling Green

WHITLEY COUNTY
W. Stuart Eads, M.D., Corbin

Membership Recruitment Year

KMA continues to grow annually but not proportionately to new physicians entering practice. Seventy percent of the practicing active physicians in Kentucky are now members. KMA's Membership Committee's goal is to increase this to 95%.

Each new physician in the state will receive an invitation to join the Federation (AMA, KMA & County). County society officers, KMA officers and Membership Committee members will all be doing their part to encourage membership. Success relies on the support and cooperation of everyone. Each member is asked to contact their non-member colleagues and encourage them to apply for membership.

In 1982, numerous mailings encouraging membership and promoting the benefits of organized medicine will be used to recruit new members. You will be informed of the progress of this program.

For your patients' benefit...

BEFORE YOU WRITE YOUR NEXT ANTIARTHRITIC PRESCRIPTION, PLEASE READ THIS MESSAGE



Boots announces a pharmaceutical first.

TWO WAYS YOUR
WILL SAVE MONEY WITH

Introducing

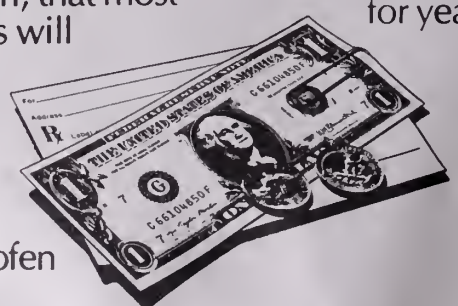
RUFEN® (ibuprofen)

$1.50 REBATE DIRECT TO YOUR PATIENTS ON EVERY PRESCRIPTION OF 100. REFILLS INCLUDED.

One dollar fifty cents returned for every Rebate Coupon your patients mail in.

Every bottle of 100 tablets of RUFEN 400 mg has a Rebate Coupon attached, with full instructions for redemption.

It has already been determined, through public opinion research, that most arthritic patients will appreciate direct rebate savings as much as they appreciate the results of ibuprofen therapy.



AND RUFEN IS PRICED LOWER TO BEGIN WITH.

Boots has already priced RUFEN lower to the wholesaler and the retailer. And if these savings are passed along, as they should be, your patient will receive the benefit of this lower price. Add these savings to the rebate, and your patients receive substantial relief from the costs of a medication many of them may take for years.

RUFEN IS NOT A GENERIC. BOOTS IBUPROFEN IS THE ORIGINAL.

And if you wish, RUFEN may be substituted for Motrin®, because it is bioequivalent.*

Original research by The Boots Company Ltd., of Nottingham, England, developed ibuprofen.

And though we introduced it ourselves elsewhere around the world, we licensed ibuprofen for sale in the United States.

Motrin® (ibuprofen) is a registered trademark of The Upjohn Comp

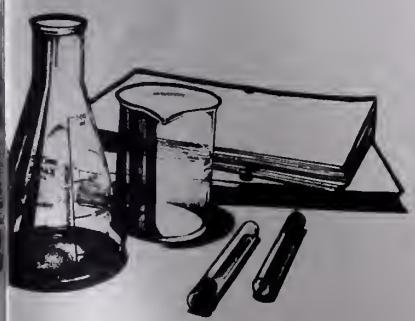
ARTHRITIC PATIENTS IBUPROFEN THERAPY.

You first came to know it as Motrin (ibuprofen), manufactured by Upjohn.

Now, as we have established facilities in America, we hope you'll come to know Boots brand name for ibuprofen as RUFEN.

BIOEQUIVALENCY? OF COURSE.*

That's why you may substitute RUFEN for Motrin.



ALSO: A BOOTS CONTRIBUTION TO ARTHRITIS RESEARCH WITH EVERY REBATE.†

A 25¢ contribution per rebate is built directly into the RUFEN program. And with thousands of prescriptions anticipated for RUFEN 400 mg each year, the annual potential for arthritis research is enormous.





Rufen® (ibuprofen)

*Data on file.

†Contributions made to: International League Against Rheumatism.

WHEN YOU'RE WRITING YOUR NEXT PRESCRIPTION FOR IBUPROFEN, PLEASE REMEMBER:

RUFEN® OFFERS A $1.50 REBATE DIRECT TO YOUR PATIENTS ON EVERY BOTTLE OF 100 TABLETS OF RUFEN 400 MG.

RUFEN COSTS YOUR PATIENTS LESS TO BEGIN WITH.

RUFEN CONTRIBUTES 25¢ PER REBATE TO ARTHRITIS RESEARCH.

RUFEN IS NOT A GENERIC...BOOTS IBUPROFEN IS THE ORIGINAL.

RUFEN (IBUPROFEN) IS BIOEQUIVALENT TO MOTRIN® (IBUPROFEN).*

I hope we've given you several good reasons to remember RUFEN the next time you prescribe ibuprofen.

If we haven't, or if you'd like to know more about Boots Pharmaceuticals or this program, please don't hesitate to drop me a line. Or call us directly at our toll-free number: (800) 551-8119. Louisiana residents, call (800) 282-8671.

To ensure that your patients receive the benefits of the Rufen program, *be sure to specify* "D.A.W.," "No Sub," or "Medically Necessary," as required by the laws of your state.

Sincerely,

John D. Bryer, President
Boots Pharmaceuticals, Inc.

Boots Pharmaceuticals, Inc.
6540 LINE AVENUE, SHREVEPORT, LOUISIANA 71106

Pioneers in medicine for the family

*Data on file.

5/81

RF-009

RUFEN® (ibuprofen/Boots)

(For full prescribing information, see package brochure.)

RUFEN® Tablets
(ibuprofen)

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain. Do not exceed 2,400 mg per day.

CAUTION: Federal law prohibits dispensing without prescription.

Boots Pharmaceuticals, Inc.
Shreveport, Louisiana 71106

Bactrim™
(trimethoprim and sulfamethoxazole)
succeeds

Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



in recurrent UTI...
a continuing record of high clinical effectiveness against common uropathogens

in acute otitis media in children...
effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
clears the sputum and lowers its volume...on *b.i.d.* dosage

in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

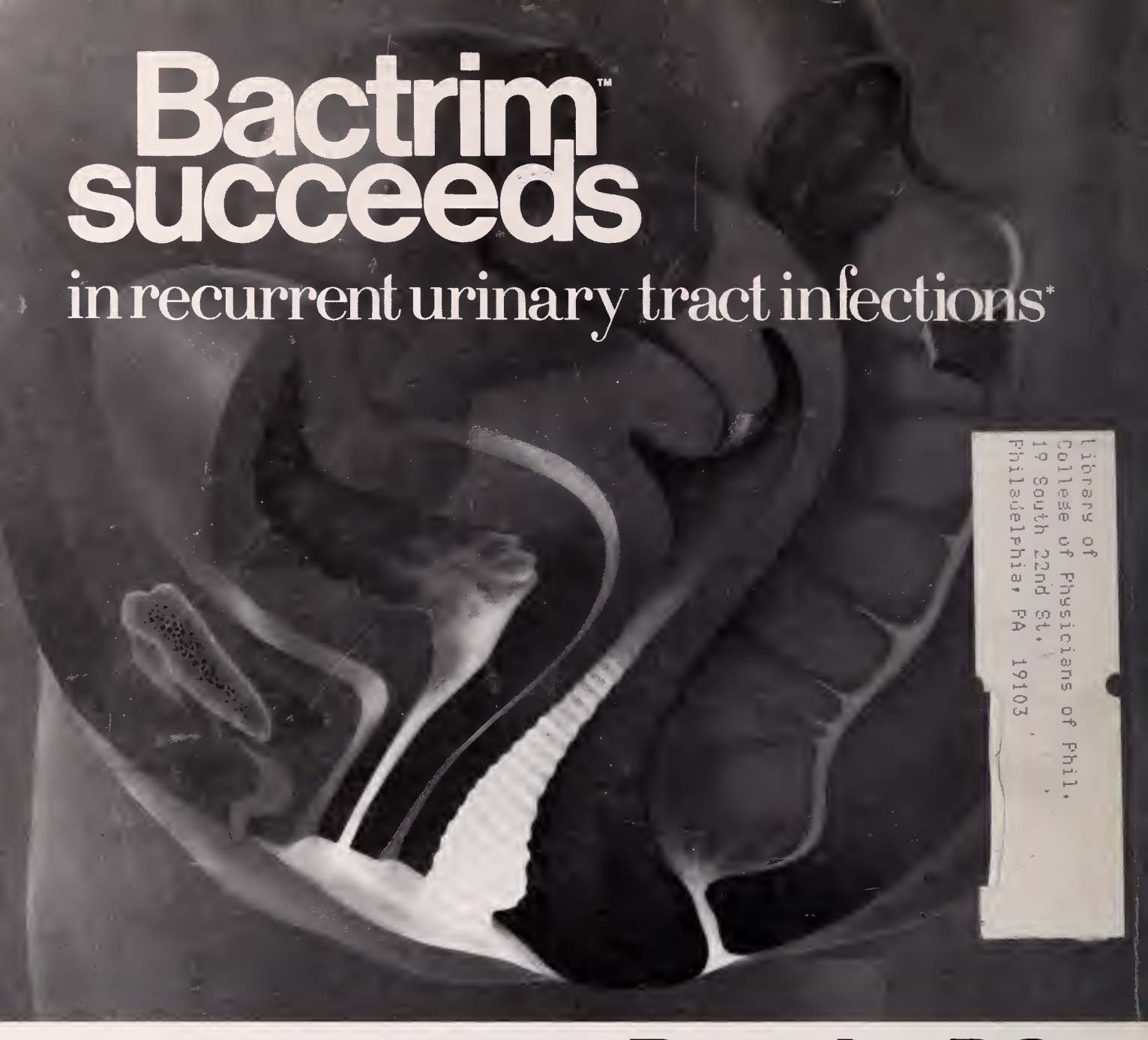
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Bactrim™ succeeds

in recurrent urinary tract infections*



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19 South 22nd St.
Philadelphia, PA 19103

from site to source

Bactrim continues to demonstrate high clinical effectiveness in recurrent urinary tract infections. Bactrim reaches effective levels in urine, serum, and renal tissue[1]...the trimethoprim component diffuses into vaginal secretions in bactericidal concentrations[1]... and in the fecal flora, Bactrim effectively suppresses Enterobacteriaceae[1,2] with little resulting emergence of resistant organisms.

1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. **2.** Data on file, Medical Department, Hoffmann-La Roche Inc.

Bactrim™ DS
160 mg trimethoprim and 800 mg sulfamethoxazole
DOUBLE STRENGTH TABLETS

maximizes results with B.I.D. convenience

ROCHE®

* due to susceptible strains of indicated organisms

Please see previous page for summary of product information.

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Tuberculosis
Physician in the Marketplace
Filing Medical Literature

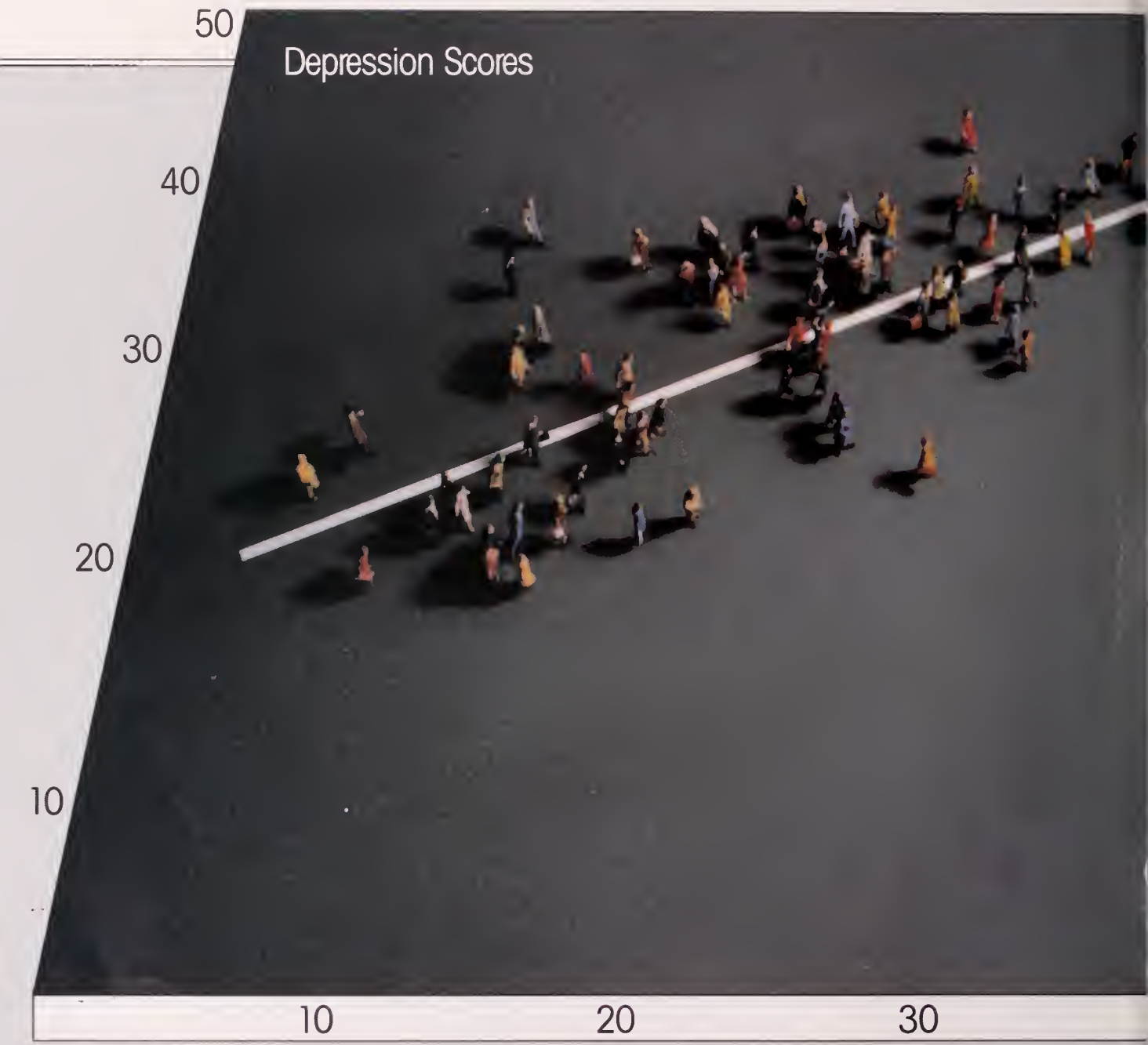
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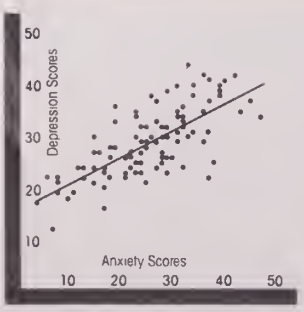
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FOR THE 7 OF 10 NONPSYCHOTIC





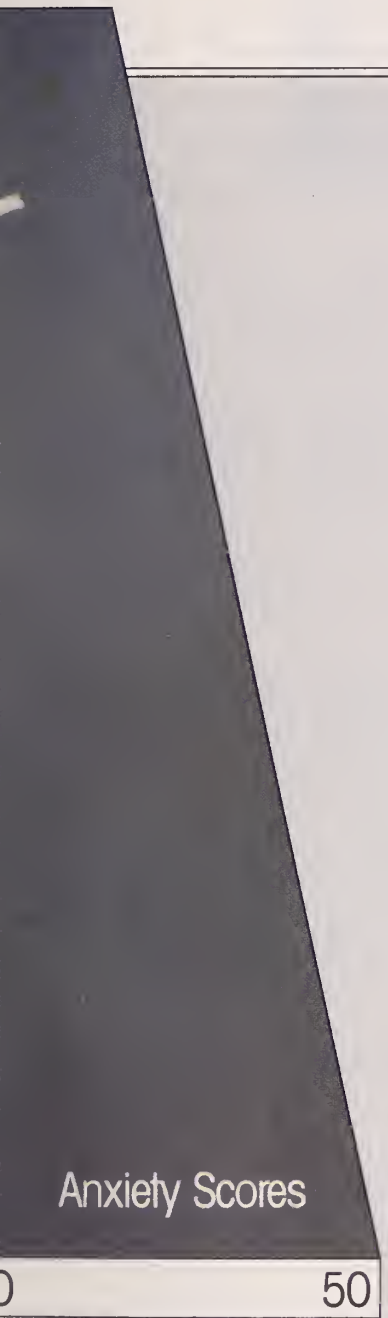
Clear correlation between anxiety and depression[3]

The above graph illustrates a relationship between anxiety and depression, indicating that patients seldom present with anxiety or depression alone; more often they have both in varying degrees. Data based on a sampling of 100 outpatients (64 male; 36 female) seen at a general psychiatric clinic.

[3]Adapted from Cleghorn, J. The anxiety-depression syndrome. *Psychosomatics 11*:438-441, Sept-Oct 1970.

ROCHE

DEPRESSED PATIENTS WHO ARE ALSO ANXIOUS[1,2]



Most depressed patients are also anxious...

Some authors estimate that 70% of all nonpsychotic patients with symptoms of depression have concomitant symptoms of anxiety.[1,2] One author found a distinct correlation between anxiety and depression scores in 100 nonpsychotic outpatients administered the Minnesota Multiphasic Personality Inventory in a general psychiatric clinic.[3] As depression scores increased, so did anxiety scores. No attempt was made to select patients other than to exclude psychotics.

but not psychotic

The logic of treating both components of anxious depression is clear. Antipsychotics, like the phenothiazines, however, carry a well-documented risk of tardive dyskinesia.[4] Because of this, an APA Task Force recently recommended the judicious use of phenothiazines in cases other than chronic psychosis or the use of alternative treatments.

A better way to give relief

Limbitrol combines the specific anxiolytic action of Librium® (chlordiazepoxide HCl/Roche)—a benzodiazepine with a long history of safe use—with the antidepressant action of amitriptyline, a tricyclic of established clinical efficacy. In comparison to phenothiazines, Limbitrol and its components have rarely been associated with tardive dyskinesia or other extrapyramidal side effects. And in terms of rapid response and patient compliance, Limbitrol appears to be superior to amitriptyline alone. Controlled multiclinic studies showed Limbitrol relieved more symptoms more rapidly than did amitriptyline.[5] Despite a higher incidence of drowsiness, the dropout rate due to side effects was lower with Limbitrol. (See adverse reactions section in summary of product information on next page. As with any CNS-acting agent, patients should be cautioned about driving or using dangerous machines while on therapy with Limbitrol.)

References: 1. Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* ed. Jarvik ME. New York, Appleton-Century-Crafts, 1977, p. 316. **2.** Schatzberg AF, Cole JO: Benzodiazepines in depressive disorders. *Arch Gen Psychiatry 35:*1359-1365, 1978. **3.** Clagharn J: The anxiety-depression syndrome. *Psychosomatics 11:*438-441, 1970. **4.** The Task Force on Late Neurological Effects of Antipsychotic Drugs: Tardive dyskinesia, summary of a task force report of the American Psychiatric Association. *Am J Psychiatry 137:*1163-1172, 1980. **5.** Feighner JP *et al:* A placebo-controlled multicenter trial of Limbitrol versus its components (amitriptyline and chlordiazepoxide) in the symptomatic treatment of depressive illness. *Psychopharmacology 61:*217-225, 1979.

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In moderate depression and anxiety

Limbitrol® 5-12.5 Limbitrol® 10-25

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)

Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Relief without a phenothiazine

Please see summary of product information on next page.

LIMBITROL® TABLETS Tranquilizer–Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use at this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12.
In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50.

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21-26 Thirteenth Family Medicine Review, Hyatt Regency Hotel, Lexington, KY

MARCH

8-10 Sixth National Nutrition in Pregnancy Seminar, University of Louisville, Health Sciences Center

24-27 International Conference on Occupational Lung Disease, Hyatt Regency Chicago, Chicago, IL

APRIL

22-24 Eighth Annual High Risk Pregnancy Management Course, Hyatt Regency, Louisville, KY

MAY

5-8 63rd Annual Meeting of the Virginia Society of Ophthalmology & Otolaryngology, Inc., Williamsburg Conference Center, Williamsburg, VA

14-15 Vitrectomy Course, University of Louisville, Health Sciences Center

20 Allergy-Immunology Update, Hyatt Regency, Louisville, KY

20-22 Adolescent Gynecology, Hyatt Regency, Louisville, KY

JUNE

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA

13-18 Seventh Annual Family Medicine Review, Galt House, Louisville, KY

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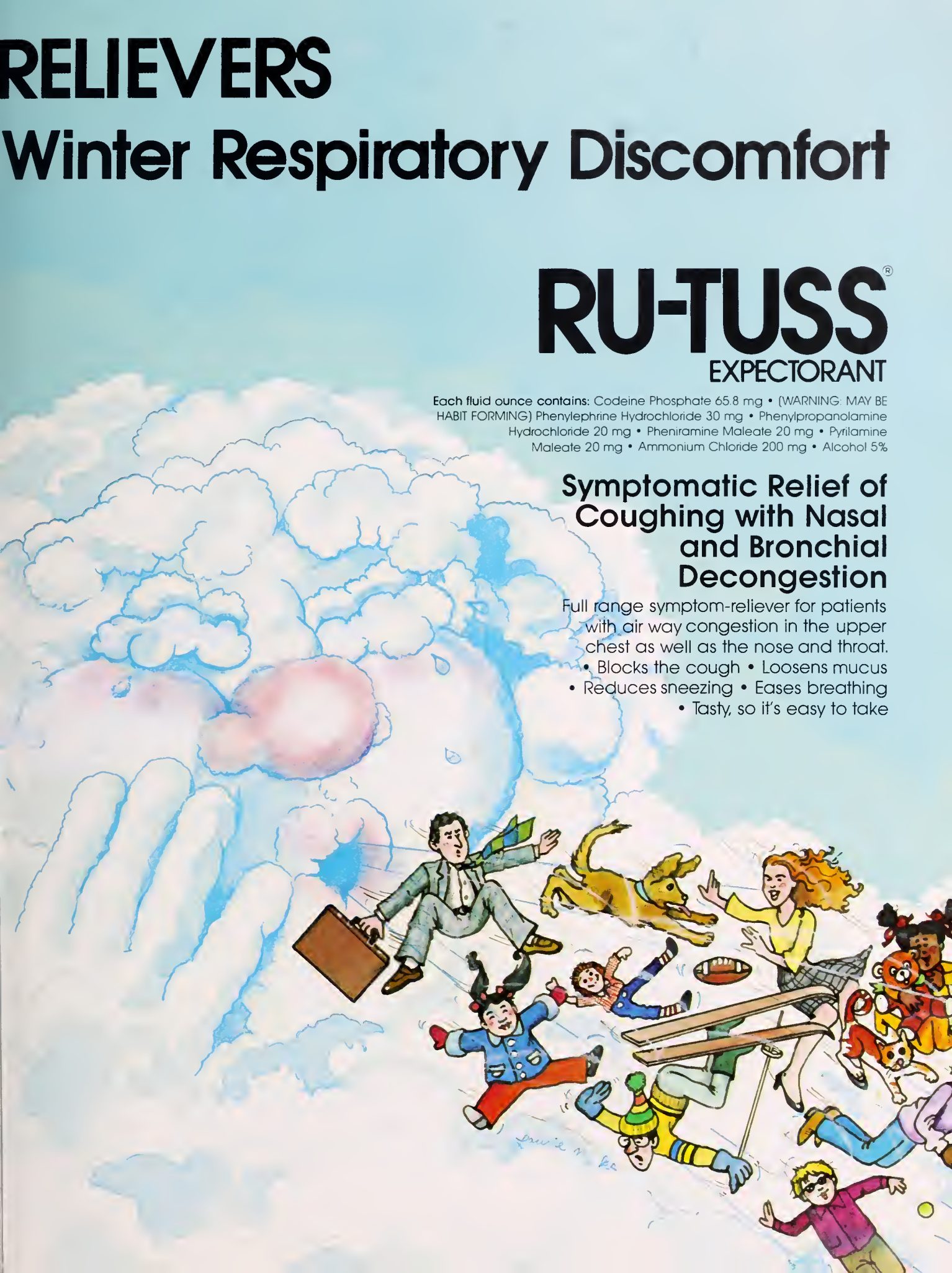
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Each fluid ounce contains: Codeine Phosphate 65.8 mg • (WARNING: MAY BE HABIT FORMING) Phenylephrine Hydrochloride 30 mg • Phenylpropanolamine Hydrochloride 20 mg • Pheniramine Maleate 20 mg • Pyrilamine Maleate 20 mg • Ammonium Chloride 200 mg • Alcohol 5%

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Full range symptom-reliever for patients with air way congestion in the upper chest as well as the nose and throat.

- Blocks the cough
- Loosens mucus
- Reduces sneezing
- Eases breathing
- Tasty, so it's easy to take



To Relieve the Symptoms of Winter Weather Upper Respiratory Distress

RU-TUSS®/RU-TUSS®

TABLETS EXPECTORANT

RU-TUSS®

Tablets

DESCRIPTION

Each prolonged action tablet contains

Phenylephrine Hydrochloride	25 mg
Phenylpropanolamine Hydrochloride	50 mg
Chlorpheniramine Maleate	8 mg
Hyoscyamine Sulfate	0.19 mg
Atropine Sulfate	0.04 mg
Scopolamine Hydrobromide	0.01 mg

Ru-Tuss Tablets act continuously for 10 to 12 hours

Ru-Tuss Tablets are an oral antihistaminic, nasal decongestant and anti-secretory preparation

INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues. Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, post nasal drip and sneezing which may be associated with an allergic-like response. The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets.

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated.

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death.

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure.

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole.

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription.

RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains

Codeine Phosphate	65.8 mg
(WARNING: MAY BE HABIT FORMING)	
Phenylephrine Hydrochloride	30 mg
Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold.

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated.

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant.

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers.

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease.

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of branchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions.

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period.

Children 6 to 12 years of age: ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not no exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles	NDC 0524-1010-16

Federal law prohibits dispensing without prescription.

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Boots Pharmaceuticals, Inc.
Shreveport, Louisiana 71106

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Shreveport, Louisiana 71106

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Pioneers in medicine for the family



PRESIDENT'S PAGE

"Inroads"

ONE of the more popular topics encountered during conversations with fellow physicians is the problem of "inroads" into the practice of medicine. Practically every specialty has, or soon will have, a confrontation with health groups seeking the right to practice medicine. Over the years of my experience with the General Assembly, we have encountered nurses, podiatrists, psychologists, pharmacists, physician assistants, physical therapists, optometrists, chiropractors, x-ray and lab technicians, all seeking a piece of the M.D. action.

Physicians generally agree that persons practicing the art of medicine should attend and graduate from medical schools. Additionally, most of us agree that the above-mentioned professionals have limited training and should be restricted to those activities for which they were trained. Ironically, physicians created most of the above-named groups to assist in areas which did not require the full attention of the physician once he made a diagnosis and treatment was begun.

With the support of bureaucrats, misinformed politicians and the benign neglect of many physicians, health groups utilizing grass-roots politics have turned the medical-health world upside down. These groups have bypassed the historical prerequisites of education, training and experience and have attempted, through legislative fiat, to enter the heretofore limited world of medicine. The real loser in this travesty is the general public, which perceives licensure by governmental bodies as a mark of approval guaranteeing quality of care.

Medicine as we know it is facing a crisis of immense proportions. Historically, we have been of one voice and a staunch defender of quality health care delivery. In the past ten years we have seen the maintenance of individual interests by specialty societies to the detriment of the profession as a whole. At the same time, some physicians have ignored or refused support to an individual specialty society in legislative matters simply because the bill in question had no effect upon their specialty or practice. Anytime a section of medicine loses, it chips away at the fabric of quality care and the public becomes the real loser.

For every problem there is a solution. The solution to our discussion entitled "Inroads" is very simple. Our first step on the road to resolving this problem is to recognize and understand the laws and government by which we operate. The practice of medicine and all other professions comes under the purview, discretion and the direction of the Kentucky General Assembly. The General Assembly, made up of 138 distinct and different individuals representing all counties and cities in Kentucky, determines the scope of your practice and the freedom with which you pursue it. We have been led to believe that the right to practice medicine is sacred and removed from the political arena. *NOT SO!* The Medical Practice Act and all other Practice Acts are products of the General Assembly and operate under its jurisdiction.

Politicians, despite their grandiose statements, understand one simple reality, that being the polls. The late Senator Everett Dirksen once said, "Politicians have three major goals—Get elected; Get re-elected;

President's Page

Don't get mad, get even." If we are to achieve any semblance of success in the legislative arena, we must get involved at the grass-roots level. Secondly, we must operate as a team and present a united front to the legislature. If legislators and other groups perceive a split in medicine, they will quickly capitalize upon these differences to "divide and conquer." Thirdly, we must be flexible and not restrict ourselves to one point of view. Very rarely is any legislation passed in its original form. Additionally, we must recognize our representatives for what they are, politicians. Each politician has a broad constituency made up of varying interests. Each of these special-interest groups has their own "axe to grind." To paraphrase an old saying, "Good legislation is in the eye of the beholder," and if you remember this basic tenet, you know how the game is played. Finally, recognize that while KMA officers and personnel work diligently to create a favorable impression on the entire General Assembly, individual legislators find their constituents at home, not on the KMA Board or staff. If we are to be successful, we must have your support and input and rely on each of you to make your views known to the Representative and Senator from your district.

The General Assembly convened on January 5, 1982, to consider some 1600 Bills of which 10% will relate to physicians practice. Be informed, be interested and be active with your legislator. Your support can mean the difference and can prevent "Inroads" into quality care and protect the safety and health of our people.

Carl Cooper Jr., M.D.
Chairman, State Legislative Activities Committee

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SCIENTIFIC

Active Tuberculosis in a Congenital Lung Cyst

A Case Report

PORTER MAYO, M.D. AND SIBU P. SAHA, M.D.

Congenital lung cysts may simulate many other pulmonary lesions but is most often confused with tuberculosis. Our patient is the first reported case in which mycobacterium tuberculosis was identified in the substance of the cyst.

Introduction

CONGENITAL pulmonary cysts have long been recognized as a pathologic entity; however, interest was lacking until 1925, when Koontz first introduced the subject into the American literature.[1,2,3] Moersch and Claggett in their review of 44 cases of pulmonary cysts stated that the condition with which they were most frequently confused was tuberculosis.[4] Even so, a collection of 525 cases fails to elicit a single patient in which the cyst wall or its contents yielded acid-fast bacilli consistent with mycobacterium tuberculosis.[1,2,3,4,5,6,7,8,9] We present a patient in which numerous acid-fast bacilli consistent with mycobacterium tuberculosis were found in the cyst, principally located in the edges of the cavity. This is the first such reported case.

Presented at the Society of Thoracic Surgeons, Seventeenth Annual Meeting, Los Angeles, CA., January 27, 1981. Title: Right Lower Lobe Cavity and Probable Active Pulmonary Tuberculosis of Right Upper Lobe. *Requests for reprints to: Porter Mayo, M.D., 168 Burt Road, Lexington, KY 40503*

Case Report

This 48-year-old lady truckdriver, complained of a "knot below my rib" of three weeks duration. She related bumping the handle of her truck door in her right lower chest, three months previously. A further complaint of blood-streaked sputum of three days duration completed her symptom review. Her husband had been treated within the past year for active pulmonary tuberculosis.

Chest roentgenograms showed minimal hyperlucency throughout both lung fields with a soft infiltrate in the right upper lobe and fibrotic strands present in the apices bilaterally. In the right lower lobe immediately overlying the diaphragm a cyst-like area with an air fluid level was present. The cyst measured 4 cm. × 5 cm. (Figs. 1 & 2)

Further examination included negative sputum, P.P.D. and complement fixation fungal studies. Bronchoscopy and bronchial secretion studies were likewise negative. Right thoracotomy and

enucleation of the lower lobe cyst was performed. The histopathology report described the cyst wall bordered by palisading histiocytes with a narrow band of amorphous material. Marked interstitial fibrosis, infiltrates of lymphocytes and scattered zones of granulomatous inflammation with many multinucleated giant cells were also evident. (Fig. 3) Special stains showed numerous acid-fast bacilli consistent with mycobacterium tuberculosis. Mycobacterium tuberculosis was later confirmed by culture. The patient responded to the combined therapy of INH and Myambutol.

Discussion

Congenital pulmonary cysts may be asymptomatic and recognized only by chest roentgenograms. Moersch and Clagett emphasize that pulmonary cysts with a bronchial communication are more apt to cause clinical symptoms than those cysts having no such communication. The latter, however, may give rise to clinical symptoms by exerting pressure on neighboring bronchi, resulting in bronchial infection.[4]

Differentiating between a congenital and an acquired cyst is especially difficult once infection occurs. The demonstration of an epithelial lining proves the congenital origin; "however, secondary infection can destroy all vestiges of this membrane, making histologic differentiation virtually impossible."[10] Often the mucous membrane is swollen and inflamed and at times a marked lymphocytic reaction is noted. Granulation tissue is sometimes present, and two of 108 cases collected by Koontz contained foreign body giant cells, and giant cells of the Langhans types. There was no trace of tuberculosis in either case; in fact, an associated tuberculosis was recorded in only five of the total cases reported.[3]

Although antibiotics may be used to control an infection, the treatment of pulmonary cysts is entirely surgical.[4] There is nothing to be gained by prolonged observation or temporizing procedures. Surgical excision of the diseased pulmonary segments provides relief of symptoms and is definitive.[12] Each operation should be tailored to correct the pathological process.[1]

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Fig. 1: PA view of chest shows a thin wall cavity in the right lower lobe and sub-apical pleural thickening bilaterally.

Acknowledgement

We wish to acknowledge the contribution of Camille M. Jernigan, Medical Research Journalist, Mayo, Long & Saha, P.S.C.



Fig. 2: Lateral view shows the cyst superimposing the posterior cardiac border and near the mid-portion of the diaphragm.

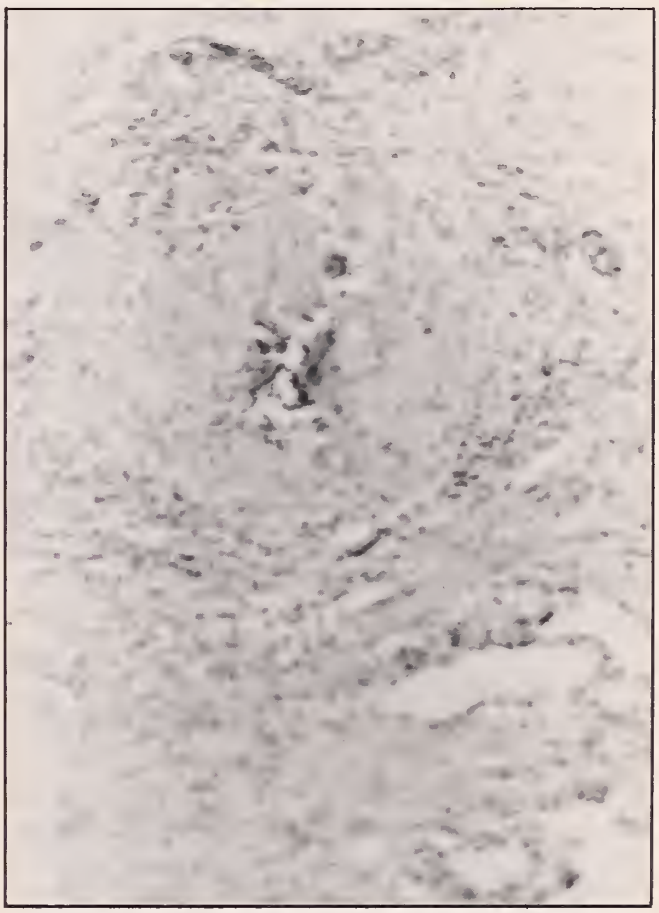


Fig. 3: Caseating granulomatous inflammation with marked interstitial fibrosis and infiltrates of lymphocytes. Ziehl-Neelsen's stain reveals numerous acid-fast beaded rods consistent with mycobacteria. (original magnification × 800)

Physician in the Marketplace

Some Implications of the Effects of Competition and Self Insurance on Medical Practice

CHARLES R. SACHATELLO, M.D.

The 1980's will be characterized by increasing competition between health care providers. This competition will be brought into focus by two incompatible forces: (1) the ever-increasing cost of medical care and (2) an increasing number of physicians and health care providers. Previous assumptions that the law of supply and demand do not apply to the market place of medical care will be shown to be erroneous. Price competition will be facilitated by the emergence of locally controlled self insurance policies and a relative decline in the importance of major third party carriers. It is the author's belief that the reason supply and demand have not been effective in medical care cost control is that the major insurance carriers have based local cost at a higher national level. Locally controlled medical self insurance policies will be increasingly adopted by industries to force the cost of local service (medical care) to be based on competitive local cost. Physicians and hospitals must strive to provide the optimum service at a reasonable cost.

THE relative economic stability of the post 1930 depression medical practice appears to be in the early stages of basic and fundamental change characterized primarily by increased competition between a variety of health care providers. Competition, especially at the price per service level, has the potential to produce shock waves in the patterns of medical practice and financing. The changes in the established patterns may be as dramatic in the office setting as those produced by newer life support systems in the clinical setting.

Competition among physicians, hospitals, and other health care providers appears to be a fact of life in several areas in the United States.[1-4] This new competitive force has important implications for all physicians and hospitals. Its impact on academic health centers may well precipitate major changes in the organization, administration, and financial support of university teaching hospitals.

From the Department of Surgery, Albert B. Chandler Medical Center, University of Kentucky College of Medicine, Lexington, Kentucky 40536

This paper is based on the documented effects of increased physician competition and the even greater potential effect that locally-based self insurance programs will have on cost control in both the private sector and in the academic health care center.

Despite the numerous and complex forces from within and without the medical care community, there are two dominant forces reshaping the pattern and financing of medical care cost. These two forces are, first, the ever increasing cost of medical care and, second, the increasing number of physicians and other health care providers.

The obvious intrinsic incompatibility of these two powerful forces preclude their moving independently or even in a parallel direction. They represent in reality opposite sides of the supply demand law of the marketplace. A third and seemingly unrelated issue, the trend to self insurance, appears to be the spark in the tinderbox of excess supply and excess cost.

It's instructive to review some of the factors that appear to be working in the marketplace of medical care.

Increased Physician Manpower

About 20 years ago a special commission projected that there was a shortage of approximately 50,000 physicians. This widely accepted figure led to both increased medical school enrollment and to the formation of a number of new schools. The number of medical school graduates has increased from around 6,000 in 1960 to 15,000 in 1980 and is expected to increase further to 19,000 in 1990. The estimated 50,000 shortage has now been overcorrected by at least another 100,000 and further overcorrection is assured.

Despite this relative excess of physicians, there are many areas in the country with a real and unquestioned shortage of physicians. But, likewise, there are areas where there appears to be a true excess. Three of these areas of excess physicians have received some attention in a variety of standard medical journals, business publications, and specialty newspapers.[1-4]

The Minneapolis-St. Paul experience has received considerable attention in both business and medical publications.[4] The development of competition was related to the combination of an active health maintenance organization which marketed its services effectively, and a business community concerned with controlling medical costs. Once the business community recognized its collective influence in determining medical costs they were able to negotiate predetermined cost per service arrangements with a substantial part of the medical community. In order to remain competitive, a number of physicians in the private sector formed independent practice associations to represent their interest in negotiating with the business sector.

The supply demand imbalance in Worcester, Massachusetts developed somewhat differently. Here a new medical school led to the influx of a number of new physicians in a low growth population area. The medical school faculty and the private sector found themselves in acute competition. It should be quite apparent that the declining federal support for medical education and research will leave a number of medical schools and university hospitals in an uncomfortable situation and further exacerbate the conflict between medical school facilities and the private sector.

The greater Oregon area is the most recent and may be the most extreme example of supply demand imbalance. A recent issue of *American Medical News* devoted almost three pages under the headlines "Oregon M.D.'s Face Empty Offices—Competition for Patients," and "Oregon M.D.'s Face Empty Waiting Rooms . .".[3] Apparently, large numbers of out of state and Canadian physicians migrated to Oregon in the past several years due to a number of factors. These included favorable living conditions and ease of state licensure. Extremely high medical liability premiums in nearby California contributed to this unanticipated physician influx.

Increasing Costs

The evidence for the ever increasing cost of medical care is so pervasive as to hardly require documentation. A few examples may be more revealing than a page of figures: the average cost of a typical health insurance policy in the U.S. exceeds the total yearly per capita income of a significant proportion of the world's population; the General Motors Corporation has reported that the cost of medical care per employee family exceeds $2,000 per year, while the cost per vehicle produced exceeds $200; the John Deere Company reported that the cost of medical care for a recent year was equal to 21% of its total profit; Dr. Grady Stumbo, Secretary for the Department of Human Resources in Kentucky, told the Fayette County Medical Society that the cost to Medicaid for a single procedure, cardiac catheterization, was now one of the most expensive items in his budget. The practicing physician, however, need only look at the cost of his personal and office staff health insurance premium to realize their impact on his office overhead.

Business Response to Increasing Costs

The typical business faced with ever increasing overhead of health care insurance has had only a limited number of viable options in the past. More recently, many small businesses clearly perceive a distinct advantage to themselves by dropping

health care insurance through a major carrier and going to self insurance with an excess liability rider. The trend to self insurance is probably greater than generally appreciated. In the Lexington area alone, a major bank, a large bottler, and even a local medical society have adopted some form of self insurance for their employees or are in the process of doing so.

It is easy to overlook several important differences and advantages that self insurance has compared with the now more common group insurance with a major carrier. With self insurance the business first obtains an excess liability rider either on an individual employee basis or in the aggregate for all employee medical costs. He then pays monthly premiums into a reserve fund. Employee related medical costs are paid from the reserve fund. Now, for the first time, a business is in a position of influencing its own employee related medical expenses. More importantly, a well designed self insurance plan can provide a monetary incentive to its insured employees to reduce medical expenses. One astute Kentucky business man who has already self-insured pays a yearly bonus to his employees having had only minimal medical expenses. His six-year experience with self-insurance has proved so cost effective he is actively considering developing a dental self insurance plan.

A review of the design of this locally controlled self insurance program provides some insight into its success and why it has the potential to influence both cost utilization and competition. A committee of employees and their employer meet weekly to review all physician and hospital bills. They know exactly what each local physician charges per service and what the cost of the program is to themselves. For example, the employees were quick to recognize that a new physician charged substantially more for his services than one of the very respected senior physicians in the area. Even informal dissemination of this cost difference has some effect on the employee's choice of a local physician. Furthermore, the employees already receive an annual bonus payment as a reward for low utilization of medical services. It's apparent to them that any increase in this bonus payment will be possible only if they play some role in controlling their medical costs.

A well designed plan such as this will almost certainly be the model for many other new plans. Already this employee has presented his experience at a major trade association meeting. Locally controlled self insurance plans will probably prove easier to develop in smaller businesses initially. But, even larger corporations may implement the incentive reward for reduced utilization as they seek some effective means of controlling their medical insurance costs.

The argument that the cost of self insurance will soon equal or even exceed the cost of major group medical insurance deserves consideration, but will almost certainly not prove to be the case. Locally controlled self insurance will provide the necessary incentive to both employer and employee to reduce costs. More important it will give them both the very means to do so.

It's only natural for locally controlled self insured businesses and employee groups to form a loosely structured organization to meet and negotiate with local physicians and health care providers. Such associations will soon realize their enormous influence in controlling and even determining medical costs. They will be able to obtain guaranteed predetermined fee schedules from local physicians, hospitals, and other health professionals. In areas with health maintenance organizations or even large physician groups, locally controlled self insurance associations will be in a position to institute effective price competition between various segments in the medical community. The Minneapolis experience is a dramatic example of how rapidly this will occur.

If the author's assumptions are correct, locally controlled self insurance associations will become increasingly dominant in health care financing at the expense of the national major medical insurance carriers. It is quite possible that the major insurance carriers will be proved to be the obstacle that previously made medical practice immune to the law of the marketplace. The growth of a few dominant health care insurers was facilitated by their effectiveness in dollar transfer. Their size may well be their undoing because by their very nature they precluded local competition. Since medical service is near totally local in nature, only locally controlled insurance associations can serve

to ignite competition and influence cost per service.

Strategy for Coping

Both hospitals and physicians must recognize that competition in health care is sure to increase. Both should begin to develop plans best suited for their continued success. Without question, both the hospital and physician with high cost overhead, ineffective management, and non-competitive facilities and location will be at a distinct disadvantage.

Traditionally, the successful physician has been best categorized by the three a's—availability, affability and ability. The changing and increasingly competitive marketplace will not diminish these attitudes but may well add another that for the sake of uniformity I'll term "accountability." The physician will be more directly accountable to his patients to justify the necessity of some of his medical costs. There can be little doubt that the physician will be forced to take the cost of a procedure into account before ordering or repeating it. The concept of diagnostic overkill will die of its own weight and cost.

Those physicians and hospitals who place a premium on exemplary patient service at a fair price will do well. Those who forget that physicians and hospitals exist for only one reason—to provide a service to those in need—will do less well.

The academic medical center and its faculty will be particularly impacted. The traditional distribution of effort between teaching research and patient care will require reanalysis. A faculty member can hardly be expected to devote substantial time to research if there is no guarantee of continued support. The decrease in clinical research career opportunities for young physicians is quite evident and will only serve to further increase competition in the private sector. Medical research must be viewed as an investment—not an expense.

We, as physicians, have an obligation to our patients and our society. We must provide excellent care at a fair and reasonable cost. We must appreciate that we do not practice in a vacuum, but that we are a major determinant in health care costs. And health care costs themselves influence the general strength and competitiveness of America's economy. The more we strive to provide excellent service at a reasonable cost the better all of us will be.

References 1. Christianson JB and McClure W: Competition in the Delivery of Medical Care. *N Engl JM* 301: 812, 1979. 2. Lavin JH, "Doctor Surplus—Close-up of a Town That's Feeling the Crunch," Med Econ, September 29, 1980, p. 69. 3. Lewis R "Oregon M.D.'s Face Empty Offices, Competition for Patients," Am Med News, January 9, 1981, p. 3. 4. Faltermayer E "Where Doctors Scramble for Patients' Dollars," Fortune, November 6, 1978, p. 114.

A Surgeon's System For Filing Medical Literature

ROLAND GIRARDET, M.D., F.A.C.S.

Reading the current literature is essential to the continuing education of the academic and non-academic surgeon. Just as important is his ability to store and retrieve the information so gathered. The incentive to one's reading is partially influenced by the efficiency of a retrieval system and a good filing system provides such incentive. Because of the large volume of literature available in monthly journals and the usually busy schedule of surgeons, a workable filing system must require minimal time and effort. The system reported here seems to fulfill the needs of simplicity and efficiency.

Method

The system uses the alphabetical classification of Medical Subject Headings in Index Medicus.[1] The headings are written in large black letters on tabs of manila folders and filed alphabetically. One folder is used for each heading and all related material is placed in the appropriate and single folder. Folders are titled and entered into the file only as need arises. The number of folders therefore reflects the range of interest of the reader. The longer the classification is in use, the fewer folders must be added unless new fields of interest develop. The system fits individual needs well and is expandable without modification at any time.

For the sake of simplicity, the cross-indexing of Index Medicus is not employed in the system herein described. Rather, articles are filed under the one heading which is the most specific heading available. When several related headings apply (designated as XU or XR in Index Medicus), a single one is selected. Cross-indexing is possible but it requires copying the titles of articles on separate pages and filing these pages under the related headings.

For subjects of special interest which need a more detailed classification, the sub-headings of Index Medicus are used. The sub-headings are written in red letters which are then placed in the file in alphabetical order behind the main heading folders. If further sub-divisions are needed, additional folders with appropriate titles are used.

Example 1:

Main heading folder: **ESOPHAGEAL REFLUX**
(contains articles dealing in general terms with reflux).

Sub-heading folders: **ESOPHAGEAL REFLUX-DIAGNOSIS**
(used for articles dealing in primarily with methods, tests, etc., and problems with the diagnosis of reflux).

ESOPHAGEAL REFLUX-ANATOMY AND HISTOLOGY
(for articles dealing with anatomic or histologic changes encountered in gastro-esophageal reflux).

ESOPHAGEAL REFLUX-SURGERY-ALLISON REPAIR
(reserved for articles dealing with this specific method of treatment).

ESOPHAGEAL REFLUX-SURGERY-BELSEY REPAIR
(etc.).

Reprint Address: 718 Medical Towers North, Louisville, Kentucky 40202

Example 2:

Main heading folder:	**HEART DEFECT CONGENITAL**
Sub-heading folder:	**HEART DEFECT CONGENITAL-SURGERY**
Further sub-divisions:	**HEART DEFECT CONGENITAL-SURGERY-ASD** **HEART DEFECT CONGENITAL-SURGERY-PDA** (etc.).

The monthly journals are of course the main source of reading material as well as the source of filing material. Articles of interest are clipped from the journals and assigned a medical subject heading and filed. If two articles share the same page, one side of this page is copied and affixed to one of the articles. The journals are discarded after use. Reprints, notes, photocopies, and so forth are handled similarly. With time, some folders will contain too many articles. Obsolete articles can be discarded or the folder split into two. The tables of contents of the journals read monthly are kept in folders labelled with the names of the journals. At six or 12 month intervals, these tables of contents are replaced by the subject index volumes of the journals.

Discussion

Two different guiding principles can be followed to classify the topics used to prepare a personal medical filing system:

I. The first principle consists in grouping the topics (*eg,* names of diseases, techniques, medications, anatomic terms, etc.) into logical categories. Those categories can be based on anatomic sites and etiologic agents such as presented in the statistical classification of the International Classification of Diseases.[2] Or, the categories may be chosen primarily by disciplines with various sub-divisions, such as in Excerpta Medica Abstract Journals.[3] Virtually any other logical arrangement can be selected to fit the preference and specialty of the reader.[4] However, this kind of arrangement seems to work best when the scope of the classification is limited. When a wide range of topics has to be encompassed, the use of logical categories has personally given unsatisfactory results. Widely different topics are often difficult to classify unless a very large number of categories are available: this rapidly leads to a very complicated and cumbersome index and file.

II. The other principle consists in using a simple alphabetical classification of the topics. Alphabetically arranged topics are already available in Excerpta Medica[3] and in Index Medicus.[1] The medical subject headings of Index Medicus were selected for the present filing system because the headings cover in some detail the entire biomedical literature and because they are already familiar to most readers who use the Index Medicus as a common source of reference. Furthermore, the classification is continuously updated without changing its basic design. Finally, the classification can be made very detailed and specific by using the already prepared list of sub-headings.

The purpose of the system proposed here is to provide the reader with a means of keeping on hand for quick retrieval the material he once read and thought he might use in the future. The file serves as a well-organized memory and can be used as a daily working instrument in reviewing cases, preparing lectures and teaching. This filing system is not designed to be a complete source of reference nor to duplicate a medical library. This is the reason journals are stripped of their interesting articles and then discarded. Experience shows that, even if it provides only a few articles of interest, a journal treated in this fashion is more useful than if kept intact on a shelf neatly bound but mostly unread and certainly less accessible.

The main effort required from the reader is that he must personally read, or at least glance at, and then select the articles of interest. Little or no writing, no reprint requests, and no secretarial help is needed. This personal involvement gives the reader first-hand knowledge of the contents of his file. Once articles are read and classified, they are placed in a basket for filing. It is more efficient to file only when many articles are ready. Initially,

filing takes some time because the headings must be selected from Index Medicus and written on the folders. Once the classification has been in use for sometime, however, few new folders need to be made and filing takes very little time. For example, filing the articles gathered from the reading of eight monthly surgical journals takes only 30 to 45 minutes per month. Finally, having the complete articles in the file is advantageous over systems in which only cards are filed, because the reader can rapidly survey the contents of all related articles of his file when adding new material.

References **1.** Medical Subject Headings, Vol. 11, No. 1, part 2, 1970. **2.** International Classification of Diseases (Eighth Revision) Vol. 1. Public Health Service Publication No. 1693. (Washington, U.S. Government Printing Office, 1967). **3.** Guide to the Use of the Excerpta Medica Abstracts Journals. (Excerpta Medica Foundation, 1969. New York Academy of Medicine Bldg., New York, N.Y. 10029). **4.** Fuller, E. A.: A system for filing medical Literature, *Ann Int Med* 68:684, 1968.

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Manuscripts will be accepted for consideration with the understanding that they are original and are contributed solely to The Journal. They should be submitted in duplicate, typed with double spacing, and should usually not exceed 2,000 words in length. The transmittal letter should designate one author as correspondent and include his complete address and telephone number.

In addition, in view of The Copyright Revision Act of 1976, effective January 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of The Journal Of The Kentucky Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to The Journal in the event that such work is published by The Journal.

Titles should include the words most suitable for indexing the article, should stress the main point, and should be short.

A synopsis-abstract must accompany each manuscript. The synopsis should be a factual (not descriptive) summary of the work and should contain: 1) a brief statement of the paper's purpose, 2) the approach used, 3) the material studied, and 4) the results obtained. The synopsis should be able to stand alone and not merely duplicate the conclusions.

References should be cited consecutively in the text and should contain, in order, the author, title of article, source, volume, inclusive page numbers, year. Journal abbreviations should conform to the Index Medicus. The Journal of KMA does not assume responsibility for the accuracy of references used with scientific articles.

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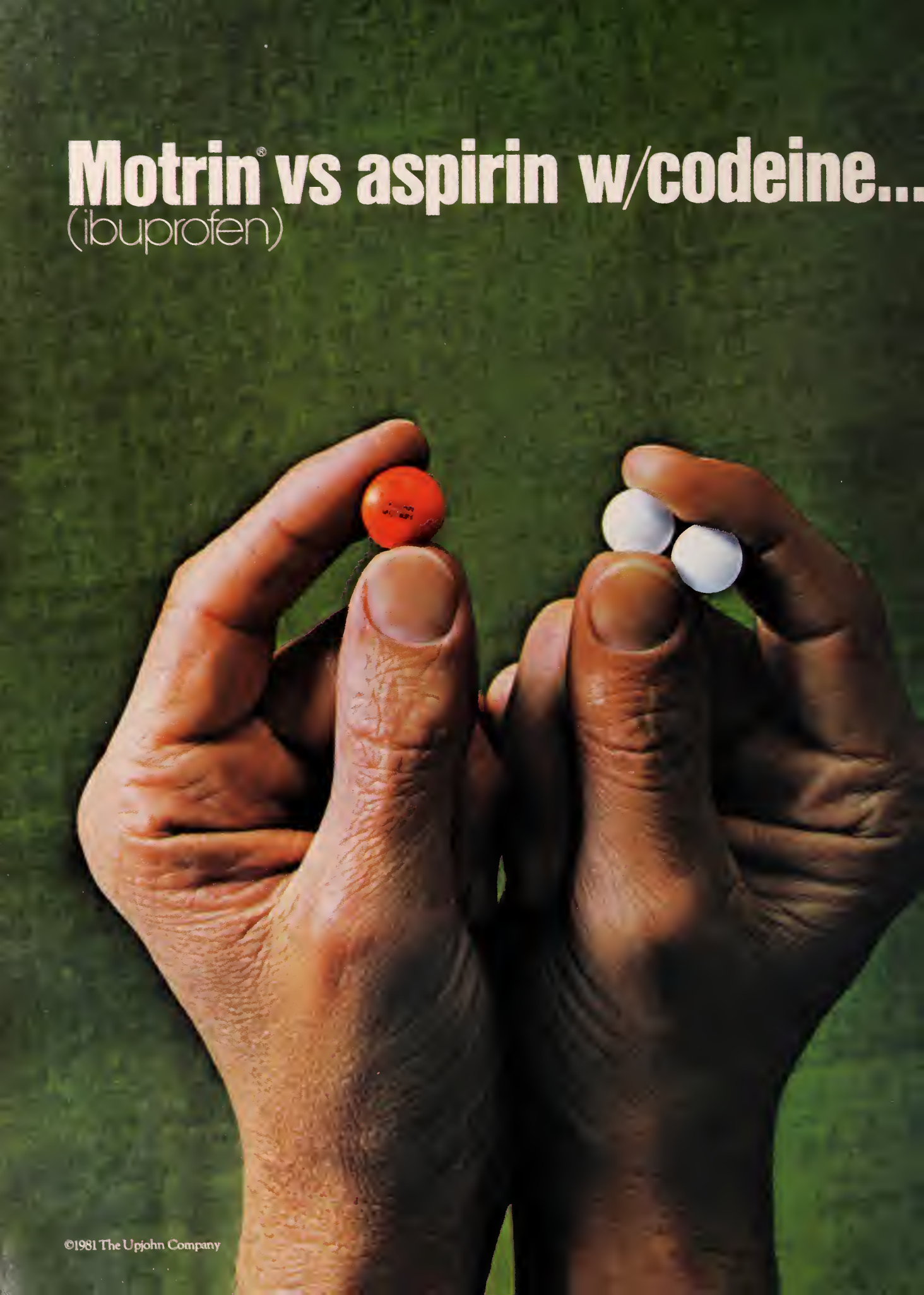


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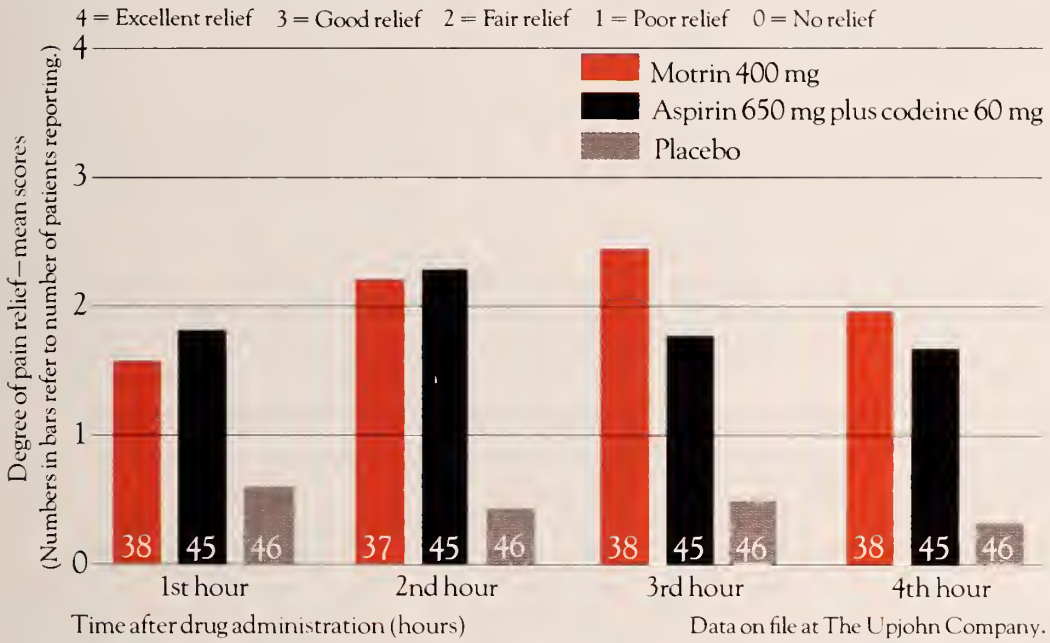


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compare the analgesic effect

A *Motrin* 400 mg dose relieved postsurgical dental pain as effectively as a combination of 650 mg aspirin and 60 mg codeine (two aspirin-with-codeine No. 3 tablets) in a study of 129 patients. In this double-blind, placebo-controlled, randomized study, no statistically significant difference in relief of pain was noted at 1, 2, and 4 hours between the *Motrin* and aspirin-with-codeine groups... with *Motrin* being significantly more effective ($p = 0.03$) at the three-hour interval. Active treatment was significantly more effective ($p < 0.0001$) than placebo at all time intervals.

Comparison of pain relief
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Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in long-term management. Safety and efficacy have not been established in Functional Class IV rheumatoid arthritis.

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Warnings: Anaphylactoid reactions have occurred in patients with aspirin hypersensitivity (see CONTRAINDICATIONS).

Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Ulceration, perforation, and bleeding may end fatally. An association has not been established. Motrin should be given under close supervision to patients with a history of upper gastrointestinal tract disease, only after consulting ADVERSE REACTIONS.

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Precautions: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If these develop, discontinue Motrin and the patient should have an ophthalmologic examination, including central visual fields.

Fluid retention and edema have been associated with Motrin, use with caution in patients with a history of cardiac decompensation.

Motrin can inhibit platelet aggregation and prolong bleeding time. Use with caution in persons with intrinsic coagulation defects and those on anticoagulant therapy.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain, or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy should have therapy tapered slowly when Motrin is added.

Drug interactions. *Aspirin*: Used concomitantly may decrease Motrin blood levels. *Coumarin*: Bleeding has been reported in patients taking Motrin and coumarin.

Pregnancy and nursing mothers: Motrin should not be taken during pregnancy nor by nursing mothers.

Adverse Reactions

Incidence greater than 1%

Gastrointestinal: The most frequent type of adverse reaction occurring with Motrin is gastrointestinal (4% to 16%). This includes nausea,[5] epigastric pain,[5] heartburn,[5] diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of the GI tract (bloating and flatulence). **Central Nervous System:** Dizziness,[5] headache, nervousness. **Dermatologic:** Rash[5] (including maculopapular type), pruritus. **Special Senses:** Tinnitus. **Metabolic:** Decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: Upper GI ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** Depression, insomnia. **Dermatologic:** Vesiculobullous eruptions, urticaria, erythema multiforme. **Cardiovascular:** Congestive heart failure in patients with marginal cardiac function, elevated blood pressure. **Special Senses:** Amblyopia (see PRECAUTIONS). **Hematologic:** Leukopenia, decreased hemoglobin and hematocrit.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** Paresthesias, hallucinations, dream abnormalities. **Dermatologic:** Alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** Hemolytic anemia, thrombocytopenia, granulocytopenia, bleeding episodes. **Allergic:** Fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** Gynecomastia, hypoglycemia. **Cardiovascular:** Arrhythmias. **Renal:** Decreased creatinine clearance, polyuria, azotemia.

Overdosage: In cases of acute overdosage, the stomach should be emptied. The drug is acidic and excreted in the urine, so alkaline diuresis may be beneficial.

Dosage and Administration: Rheumatoid arthritis and osteoarthritis, including flares of chronic disease: Suggested dosage is 300, 400, or 600 mg t.i.d. or q.i.d. Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain.

Do not exceed 2400 mg per day.

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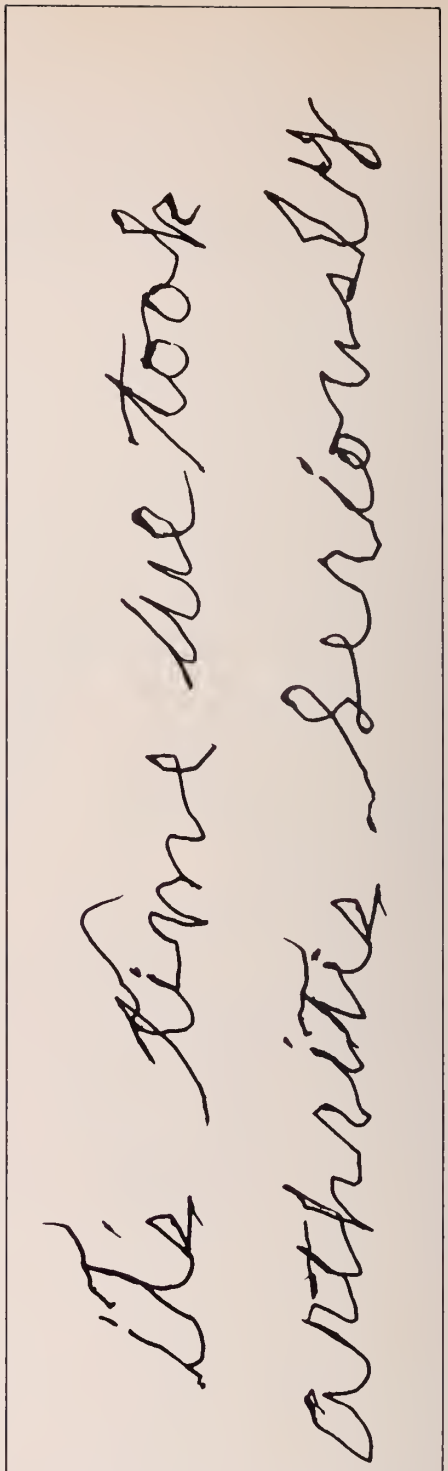
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Jeffrey P. Fowler, M.D., Chairman

March 3, 1982 (Wednesday)

Morning Session

8:00-8:50 a.m.	Registration
	(10 minute audience discussion and questions following each presentation)
9:00-10:00 a.m.	BERNARD D. ROSENBLUM MEMORIAL LECTURE "Dynamic Coronary Tone and the Use of Calcium Channel Blockers" Stephen Epstein, M.D., Chief, Cardiology Branch National Heart, Lung & Blood Institute National Institute of Health, Bethesda, Maryland
10:10-10:30 a.m.	Coffee break and Exhibits
10:30-11:10 a.m.	"Evaluation of Cardiac Mass Lesions—Cardiac Thrombi, Tumors and Vegetations" Anthony DeMaria, M.D., Professor of Medicine, Chief, Cardiology Division, University of Kentucky School of Medicine, Lexington, Kentucky
11:20-12:00 noon	"New Applications in Cardiac Ultrasound—Regional Wall Motion, Contrast Echo and Doppler Ultrasound" Anthony DeMaria, M.D.
12:10-2:00 p.m.	Lunch and Exhibits

Afternoon Session

2:00-2:40 p.m.	"Cor Pulmonale and Pulmonary Hypertension" Roy H. Behnke, M.D., Professor and Chairman, Department of Internal Medicine, University of South Florida, Tampa, Florida
2:50-3:35 p.m.	"Non-Hemodynamic Pulmonary Edema" Roy H. Behnke, M.D.
3:35-3:50 p.m.	Break
3:50-4:30 p.m.	"Hypertrophic Cardiomyopathy" Eric Williams, M.D., Associate Professor of Medicine, Research Associate, Krannert Institute of Cardiology, Indiana University, Indianapolis, Indiana

ON CARDIOVASCULAR DISEASES
— March 3-4, 1982 (EST)

March 4, 1982 (Thursday)

Morning Session

8:00-8:50 a.m.	Registration
	(10 minute audience discussion and questions following each presentation)
9:00-9:40 a.m.	"Cardiogenic Shock" R. Joe Noble, M.D., Consulting Cardiologist, St. Vincent and Healthcare Center, Clinical Professor of Medicine, Indiana University, Indianapolis, Indiana
9:50-10:30 a.m.	"Afterload Reduction for Severe Congestive Heart Failure" R. Joe Noble, M.D.
10:35-10:55 a.m.	Coffee break and Exhibits
10:55-11:35 a.m.	"Update on the Pharmacology of Cardiovascular Drugs, New Concepts and New Agents: Part I" August Watanabe, M.D., Professor of Medicine and Pharmacology, Indiana University School of Medicine, Indianapolis, Indiana
11:40-12:20 p.m.	"Update on the Pharmacology of Cardiovascular Drugs, New Concepts and New Agents: Part II" August Wantabe, M.D.
12:30-2:00 p.m.	Lunch and Exhibits

Afternoon Session

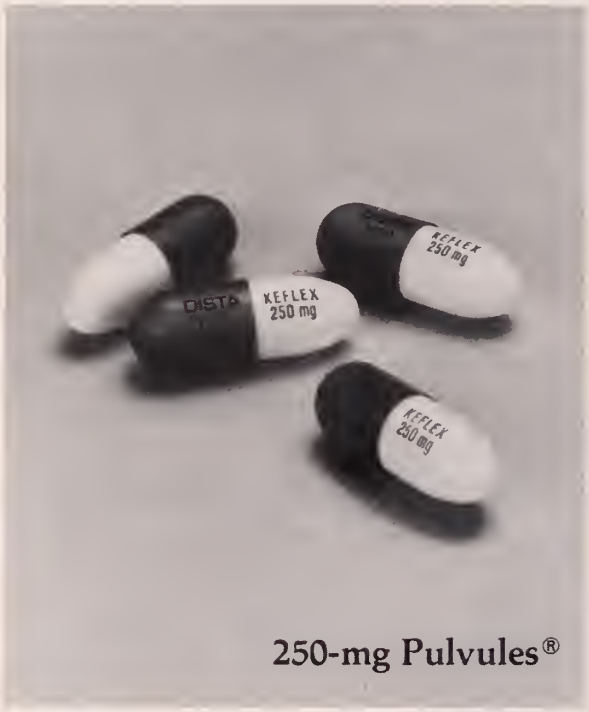
2:00-2:40 p.m.	"Current Status of Coronary Angioplasty" Spencer King, III, M.D., Professor of Medicine (Cardiology) and Radiology, Emory University, Atlanta, Georgia
2:50-3:35 p.m.	"Current Approaches to the Evaluation of Patients with Ischemic Heart Disease" Spencer King, III, M.D.
3:45-4:30 p.m.	"The Blue Baby—Where to Go and What to Do" Robert E. Solinger, M.D., Associate Professor of Pediatric Cardiology, University of Louisville, Louisville, Kentucky Constantine Mavroudis, M.D., Assistant Professor of Surgery, Division of Cardiothoracic Surgery, University of Louisville School of Medicine, Louisville, Kentucky

As an organization accredited for continuing medical education, the Louisville Area CME Consortium, Inc., and the American Heart Association, designates this continuing medical education activity as meeting the criteria for 11 credit hours in Category 1 of the Physician's Recognition Award of the American Medical Association. This program has been reviewed and is acceptable for 11 Prescribed Hours by the American Academy of Family Physicians.

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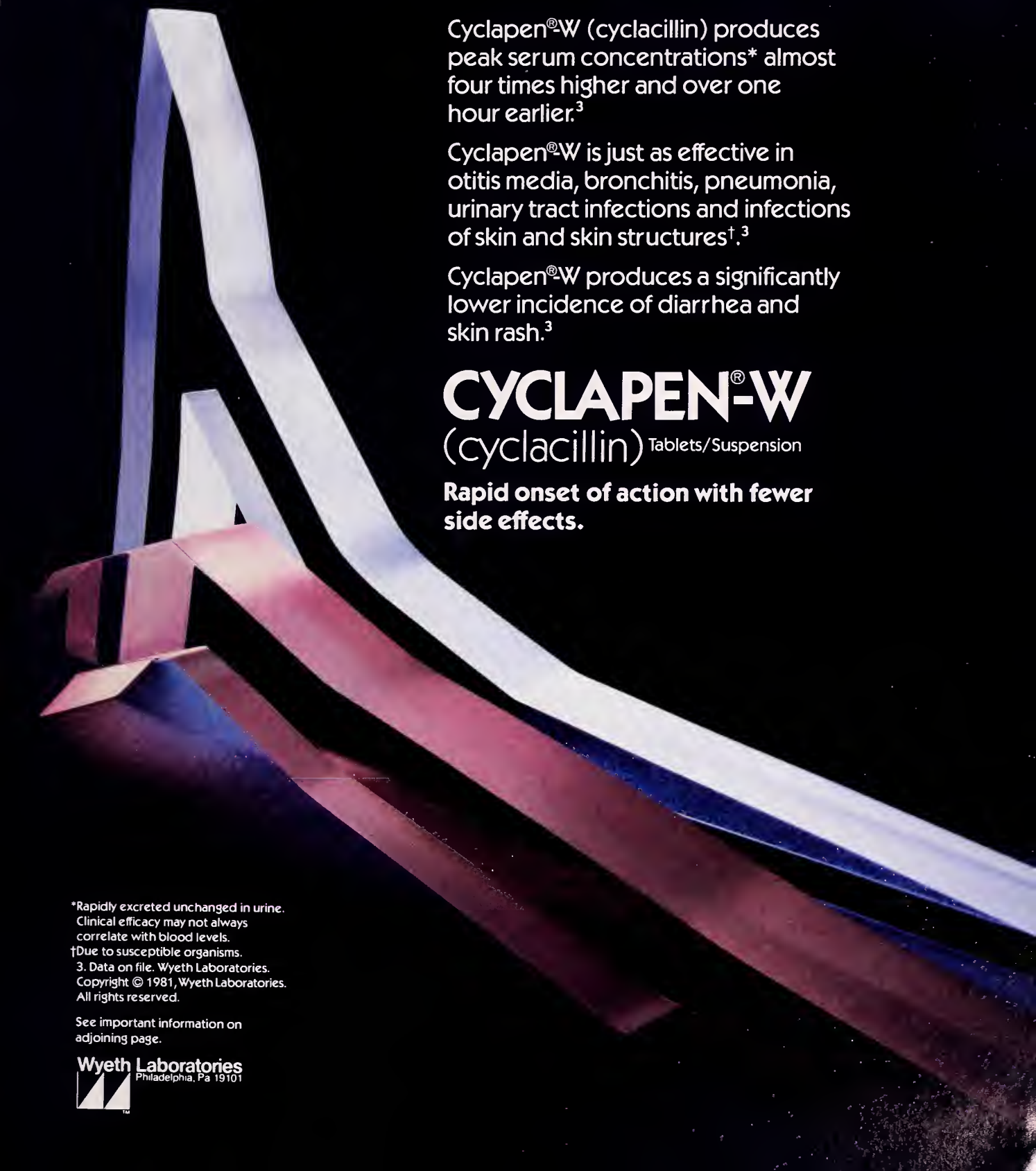
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Cyclapen®-W is just as effective in otitis media, bronchitis, pneumonia, urinary tract infections and infections of skin and skin structures†.[3]

Cyclapen®-W produces a significantly lower incidence of diarrhea and skin rash.[3]

CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

Wyeth Laboratories
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Compared to amoxicillin

Faster peak. Fewer problems.

. . . in infants and children

Cyclapen®-W (cyclacillin) produces twice the peak serum concentration* (15.6 mcg/ml versus 7.3 mcg/ml) in half the time (30 minutes versus 60 minutes).[1]

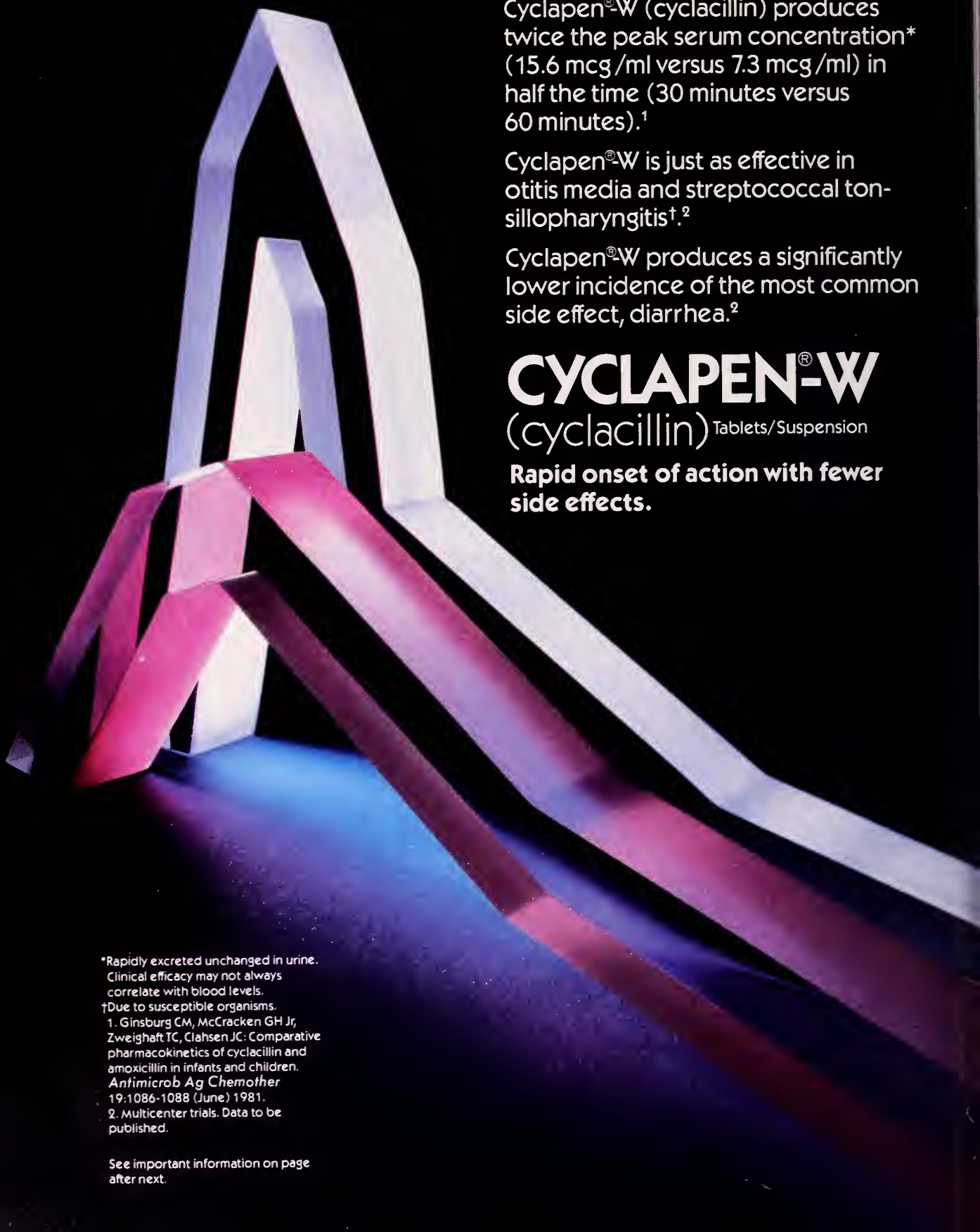
Cyclapen®-W is just as effective in otitis media and streptococcal tonsillopharyngitis†.[2]

Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.



*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.

†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ompicillin closs ond its use shauld be canfined to these indications: Treotment af the following infections:

RESPIRATORY TRACT
Tonsillitis ond phoryngitis coused by Group A beto-hemalytic streptacacci
Bronchitis and pneumonia caused by *S. pneumonioe* (formerly *D. pneumoniae*)
Otitis medio coused by S. pneumaniae (formerly D. pneumoniae) ond *H. influenzae*
Acute exacerbatian of chronic bronchitis coused by *H. influenzoe**
*Though clinical improvement has been shown, bocteriologic cures cannot be expected in all potients with chranic respiratory diseose due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentory) infectians caused by Group A beto-hemolytic streptococci and stophylococci, nanpenicillinase producers.

URINARY TRACT INFECTIONS caused by *E. cali* ond *P. mirabilis*. (This drug should not be used in ony *E. cali* ond *P. mirabilis* infections other thon urinory troct.)

NOTE: Perform cultures ond susceptibility tests initially and during treotment ta monitor effectiveness of theropy ond susceptibility of bacteria. Therapy moy be instituted prior ta results af sensitivity testing.

Contraindications Contraindicoted in individuols with histary af an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may pramote overgrowth af nansusceptible organisms. If superinfection occurs, toke oppropriote measures.

PREGNANCY: Pregnancy Category B. Reproductian studies performed in mice and rats at doses up to 10 times the humon dose revealed no evidence of impaired fertility or horm to the fetus due to cyclocillin. There are, however, no odequate and well-controlled studies in pregnant women. Becouse animal reproduction studies ore not olways predictive of humon respanse, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not knawn whether this drug is excreted in humon milk. Because many drugs ore, exercise caution when cyclocillin is given to a nursing womon.

Adverse Reactions Orol cyclocillin is generally well talerated. As with ather penicillins, untoword sensitivity reoctions ore likely, particulorly in those who previously demanstroted penicillin hypersensitivity or with history of allergy, asthma, hoy fever, or urticorio. Adverse reactians reported with cyclacillin: diorrheo (in oppraximotely 1 aut af 20 patients treated), nausea ond vomiting (in oppraximately 1 in 50), and skin rash (in oppraximotely 1 in 60). Isalated instonces of headache, dizziness, obdominal pain, vaginitis, ond urticaria hove been reparted. (See WARNINGS) Other less frequent odverse reoctions which may occur ond ore reported with other penicillins are onemio, thrombacytopenia, thrombacytopenic purpuro, leukopenia, neutropenio ond eosinophilio. These reactions are usually reversible on discontinuotian of theropy.

As with ather semisynthetic penicillins, SGOT elevations hove been reparted.

As with antibiotic theropy generolly, continue treatment ot least 48 to 72 haurs after potient becames asymptomotic ar until bocteriol erodicotion is evidenced. In Group A beta-hemolytic streptococcol infections, ot leost 10 days' treotment is recommended to guord agoinst risk of rheumatic fever or glamerulonephritis. In chranic urinory tract infection, frequent bocteriologic ond clinical approisol is necessory during therapy ond possibly for several months ofter. Persistent infectian may require treatment for several weeks.

Cyclacillin is nat indicated in children under 2 manths of oge.

Patients with Renal Failure Cyclocillin may be safely odministered to potients with reduced renal function. Due to prolonged serum half-life, potients with various degrees af renol impairment moy require change in dosoge level (see DOSAGE AND ADMINISTRATION in pockoge insert).

Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratary Tract		
Tansillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d.
		body weight > 20 kg (44 lbs) 250 mg q.i.d.
Bronchitis ond Pneumonio		
Mild or Maderate Infections	250 mg q.i.d.	50 mg/kg/doy q.i.d.
Chronic Infectians	500 mg q.i.d.	100 mg/kg/doy q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/doy†
Urinory Tract	500 mg q.i.d.	100 mg/kg/day

*Dosoge should not result in o dose higher thon that for odults.
†depending on severity

How Supplied Tablets 250 mg and 500 mg in bottles af 100. Oral Suspension 125 mg and 250 mg per 5 ml in bottles ta make 100 ml ond 200 ml of Suspension.

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or Call (502) 582-5174

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As seen on admission



After one week of penicillin V-K therapy



Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® (cloxacillin sodium)	Given penicillin V-K
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus* and *Streptococcus pyogenes	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup. These were all called by telephone, and their families reported the lesions had healed. One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus*, 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes*, and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

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WARNING:
Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:
The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:
Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:
Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

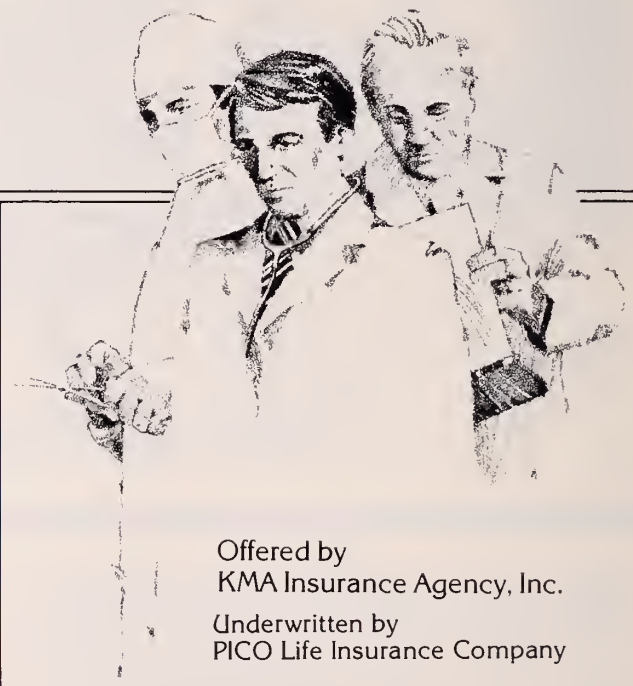
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EDITORIAL

Nurse!

THE final report of the KMA-KNA Joint Practice Committee, accepted at the 1981 KMA meeting and published in the December 1981 *Journal,* recommends the discontinuation of the committee concluding a report that enumerates compelling reasons that the committee should have continued with greatly increased activity and influence. Why should this pessimistic paradox be permitted? Because the "joint" committee could not function without some cooperation from the KNA which, after a period of several years' noncooperation, stopped its membership in the committee in 1981.

What noncooperation? The physicians of Kentucky have been attentive to the urgent and deteriorating problems of nursing, namely the insufficient numbers of registered nurses to staff hospitals and organizations supplying nursing needs. The KNA concern with the problems of nursing has been how to promote and effect the "Independent Practice" of nurses. Since the concerns and missions of the two groups are completely disparate it becomes obvious that a joint committee cannot generate a solution.

In our day to day efforts to improve the health and comfort of our patients we observe continually that the nurses who work with us on our patients are enthusiastic, interested, concerned, accomplished, sympathetic and effective. These nurses do express desires for more adequate compensation, improved relations with doctors and hospital administrators and increased influence on decisions relating to patient care but they do not seem to us to wish replacing the direction of medicine from doctors to nurses.

For years the leadership of nursing has influenced nursing education to associate it with university sanction, presumably to increase the quality of the graduate nurse. We presume this but we have not observed an appreciable increase in quality of nursing. We have predicted and observed a devastating decrease in the quantity of nursing. We lament the impending expiration of Kentucky's last hospital associated two year course for registered nurses at Highlands Baptist Hospital, Louisville. At the conclusion of this long and stressful period of transition of nursing training from hospital to university we are unable to appreciate any increase in the quality of nurses attributable to the change. Now that nursing education is almost completely university directed, our desperation for more nurses is the greatest.

Having "solved" the "problem" of education, the nursing leadership now turns its attention to changing the character of its profession from nursing to the direction of medical care by nurses. Doctor Carl Cooper, Chairman of the KMA Committee on Legislation, writes boldly of our "confrontation with health groups seeking the right to practice medicine" in this issue of the *Journal,* the President's Page.

If the leadership of nurses succeeds in this transition, our problem, that of patients and physicians, will be further aggravated. We still have too few nurses.

A. Evan Overstreet, M.D.

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SPECIAL ARTICLE

National Health Insurance—A Clean Slate

Richard A. Wright, M.D., John Vahaly, Ph.D., Robert Wessel, Ph.D.

Introduction

In response to the burgeoning cost of health care and a changing view of individuals' right to health care, there has been considerable interest in the enactment of a national health insurance program by the federal government. National health expenditures have more than quadrupled since 1965, with current projections indicating that the cost of health care will rise to $245 billion in 1980, $440 billion in 1985 and $760 billion in 1990.[1] These rising costs have resulted in 45 different national insurance proposals being introduced during the 93rd Congress.[2,3] No acceptable solution to the dilemma has been formulated.

Lessons from Foreign Experience

Federally sponsored health care systems in other western countries have significant problems. The British National Health Service has inherent inequities with effective rationing of services by both waiting lines and price.[4] Furthermore, a legal private market exists permitting the wealthy to seek fee-for-service care outside the system, thus creating a double standard of health care.[5] Sweden's Regional Health Care System has resulted in substantial reduction in medical education and adverse health care distribution.[6,7] Other European national health plans such as in West Germany and France have suffered from rapidly rising expenditures after implementation.[8]

Because of economic and social similarities, the Canadian health insurance plan is perhaps more applicable to the United States.[9] However, since its creation in 1970, the quantity of health care delivered has actually decreased, despite increasing demands from the public, and rapidly advancing technology. The notion that the number of physicians in a particular area is directly related to demand by the consumer was effectively disproved.[10,11] Shortages in health care personnel and hospital beds have resulted from governmental spending ceilings instituted to contain the spiraling cost of health care.[12,13]

From the Department of Medicine and Graduate School of Business, University of Louisville, Louisville, Kentucky and The Graduate School, University of Cincinnati, Cincinnati, Ohio.

Past U. S. Proposals

In the United States, virtually every organization which would be affected by national health insurance has proposed alternative solutions.[14,15] While there has been little consensus over the proper course to pursue, bipartisan support in Congress has been elicited for several bills in recent years.

The Kennedy-Waxman Bill (health care for all Americans Act, S1720, HR5191) is the latest revision of the evolutionary Kennedy-sponsored health care plan. It consists of comprehensive health care coverage for all citizens through federal reimbursement of providers and facilities.[15] The plan has been widely criticized for its high cost ($40 billion in the first year alone), "command and control" bureaucratic regulations, and ostensibly adverse effect on the quality of health care.[16]

The Carter Proposal (S1812) falls into an area between the comprehensive Kennedy plan and the current system. It relies on voluntary compliance with federal fee levels (except for Medicare and Medicaid), and regulatory mechanisms consisting of those already in operation. The first year cost of $18 billion dollars is less than half of the amount of the Kennedy plan.[16] The bill has been criticized for the lack of controls and the potential inequities in care because of federal fee structures.[17]

The Long Bill (S1760, more widely publicized catastrophic health insurance plan) has been substantially replaced by the Martin Bill (Catastrophic Automatic Payment Plan). Both bills are aimed at closing gaps in current health insurance coverage, and both have bipartisan support. They essentially provide "major medical" coverage for all citizens at government expense with little regulatory bureaucracy. The basic criticism of both bills is that "major medical" insurance is the most rapidly growing form of health insurance, and if legislative delays occur, the bills would not be necessary.[18]

The Stockman-Gephart National Health Care Reform Act of 1980 is one of the most recent proposals receiving widespread press. Its emphasis is on market competition for price controls with deregulation of the health care industry, and elimination of cost-based

reimbursement. Criticisms have been leveled at the lack of support for health maintenance organizations and professional standard review organizations in favor of the supply and demand equilibrium.[19] Opponents claim that this bill will decrease the quality of health care and allow unfair advantages to medical schools if passed by Congress.[19]

With the dramatic tide of conservation evidence by the recent election, and changes in the executive and legislative branches of government, it would appear that the slate has been wiped clean in regard to previous legislation. The Martin proposal and National Health Care Reform Act of 1980 both have Republican support, but austerity and budget cuts are likely to preclude their passage. The Republican National Convention Platform is clearly on the side of deregulation and defederalization of health care, but is sufficiently vague to allow for enormous variation in interpretation.[20]

The Future

The government already funds nearly 40% of health care spending in this country, including over $70 billion from federal funds and $30 billion in state and local expenditures.[1] Federal monies are primarily channeled into health care for the elderly (Medicare), the poor (Medicaid), government projects, (VA, American Indian, Public Health Service), and hospital construction (Hill-Burton, FHA). The question of additional governmental regulatory expansion into private medical markets underlies the issue of National Health Insurance.

The need for a federally operated comprehensive health plan is questioned by many.[15,16] Historical and projected figures indicate that over 92% of hospital care, the largest expenditure in national health, is covered by public or private third party sources.[1] The cost of financing the remaining 8% on a national basis may well be prohibitive. Furthermore, with the growth of Health Maintenance Organizations and comprehensive industrial health plans, the percentage of uninsured persons will certainly decline. The justification of large expenditures to fill the gap remains in question.

There seems to be little doubt that health care is rapidly being conceived by the American public as a right. However, only those who have comprehensive insurance or substantial funds can afford to seek out more sophisticated techniques.[21] This will remain true under any NHI regime since society can not afford to provide all advanced services to all citizens. The basic economic principle of scarcity operates in the health care industry and its fundamental implication is that no federally funded program can guarantee equal care to all. That goal is simply beyond our capacity to achieve.

Promoting increased competition in health services as an alternative to governmental regulation faces substantial barriers. The lack of consumer information and the sophistication of current knowledge makes rational decision-making by consumers difficult to achieve. On the supply side, it is also challenging for practitioners to keep abreast of new developments. There is also the problem of differences in market structure between urban and rural areas. In cities with several hospitals and many doctors, some price competition can and does occur. However, in small towns and rural areas, supply and price can be dictated at the discretion of the providers. Fortunately, medical ethics and consumers' ability to pay are functional in this circumstance.

All governments which have considered public policies in order to limit health care cost increases have essentially two options to pursue. One is to move toward greater reliance on competitive markets to improve efficiency and hold costs down. This embraces consideration of many policies including increased use of paramedical personnel, group practices, greater reliance in co-insurance, Health Maintenance Organizations (HMOs), improved consumer information about health services, and even a reduction in medical training time.[22-24] Some advocate co-insurance, where the government pays a set fee for a given service, and the consumer is billed for the rest. Others have suggested tax incentives as a means of economizing (Ullman-HR5740, Martin-HR6405, Durenberger-S1968, Schwieker-S1590). Health Maintenance Organizations (HMOs) might be efficacious in controlling cost by feedback incentives to providers.[27] HMOs are gaining a larger market share as time passes, but their ultimate destiny remains uncertain.[23] Other private cost containment programs have been espoused as a means to promote a market solution to the problem of costs in the health care industry.[22-24]

The other option is to move toward increasing governmental regulation of the health care industry. This includes limits on expenditures of physician services through negotiated or imposed fee schedules, as well as limits on inpatient care and capital expenditures.[22] The Canadian and European solution has been the latter with little emphasis given to reliance on market forces to solve the problems of care cost increases.

It is probably true that the regulatory approach to providing health care would be more inefficient and expensive than in a market approach. Recent deregulation of several transportation modes seems to support this contention. It is simply beyond the capability of any bureaucracy to efficiently and equitably manage the thousands upon thousands of health care trans-

actions as effectively as a decentralized market mechanism would be able to do so.

The implications of increasing federal involvement in the health care marketplace are gargantuan.[25] Distribution, equity, and costs of such an endeavor are major issues. The social versus individual responsibility controversy is the basic philosophical issue at the heart of the matter. The faltering economy and social unrest may well dictate short term decisions, but the eventual choice of socialism opposed to free enterprise in health care will remain the most important issue until definitive action is taken to affect the long-term solution.

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50TH ANNUAL ASSEMBLY, THE SOUTHEASTERN SURGICAL CONGRESS, SHERATON HOTEL, BAL HARBOUR, FLORIDA, MARCH 1-3, 1982.



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Comparison of Anorectics

	Agent	Amine Classification	Half-life[a]	Variety of Dosage Form	Degree of CNS Effects
Low Abuse Potential	**Diethylpropion**	Tertiary	4-6 hrs.	25 mg tablet, 75 mg controlled-release tablet	Mild euphoria, mild stimulation
	Mazindol	Nonphenylethyl-amine	33-55 hrs.	1 & 2 mg tablet	Mild euphoria, mild stimulation
	Fenfluramine	Secondary	10-30 hrs.	20 mg tablet	Moderate sedation (mild to moderate depression, a side effect, is also sometimes designated as a CNS effect)
	Phentermine	Primary	19-24 hrs.	8 & 37.5 mg tablet, 8, 15 & 30 mg capsule 15 & 30 mg capsule (resin complex) 15 & 30 mg timed release capsule	Mild euphoria, moderate stimulation
High Abuse Potential	**Phenmetrazine**	Secondary	7-9 hrs.	25 mg tablet, 50 & 75 mg prolonged action tablet	Marked euphoria, marked stimulation
	Amphetamine	Primary	10-30 hrs.	Various	Marked euphoria, marked stimulation

[a]Delayed release characteristics of certain dosage forms must also be taken into account.

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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle, the patient should therefore be cautioned accordingly. When central nervous system active agents are used, consideration must always be given to the possibility of adverse interactions with alcohol. *Drug Dependence*. Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*. Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*. Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular*. Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*. Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*. Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*. Urticaria, rash, ecchymosis, erythema. *Endocrine*. Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*. Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*. A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride). One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release. One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of June, 1980

Reference: 1. Abramson R, Garg M, Cioffari A, and Rotman PA, An Evaluation of Behavioral Techniques Reinforced with an Anorectic Drug in a Double-Blind Weight Loss Study. J Clin Psych 41:234-237, 1980

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Title: "Combination chemo-hormonal therapy in the treatment of breast cancer."

LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

The article by Doctor G. L. Stephens on medical students makes interesting reading.

Kentucky is clotted with a large number of M.D.'s with more on the way. The two medical schools crank out about 250 to 270 per year and the state inherits 20 to 30 from India and Asia per year. This being on the "Road to Mandalay" reversed. That is a lot of M.D.'s for a small state with a small population.

Kentucky taxpayers pay for a large part of this, they are being shafted. First place, the state needed a second medical school like they needed an extra hole in the head. The medical school at U.K. was created not out of need, but only because a politican wished to have something named after himself. An outhouse would have been more fitting.

The state of Kentucky has a shortage of doctors in rural areas, this could be helped by (1) interview each student and accepting students who wish to practice in rural areas. Some would change their mind, but more would be obtained this way than is done at present. Also, by this the enrollment of each school could be cut in about half.

This would upgrade the medical schools, place them on a firmer economic foundation, it would allow more of the teachers to teach and the research doctors to research, many of the research people used to teach medical students do more harm than good. They waste the medical students time.

Clifton E. Lowry, M.D.
Owensboro, Ky.

To The Editor:

In 1976, the Kentucky General Assembly enacted legislation which established the Kentucky Hemophilia Program. To oversee it, the Governor appointed a State Hemophilia Committee.

The Committee soon realized that it needed answers to such critical questions as: How many hemophiliacs are there in our state? What type of specific disorder do they have? How old are they? What treatment do they receive? How much does it cost?

The committee, whose membership included representation of the medical profession and other healing arts, soon found that the Kentucky Department of Human Resources also had need of the answers to these questions. So, the Department contracted with the Kentuckiana Hemophilia Foundation to develop a Hemophilia Patient Registry. Mrs. Sue Zimmerman, RN, is directing this effort.

This project NEEDS your help. We ask that you bring it to the attention of the hemophiliacs you serve or treat. This program is for their benefit. We wish to inform them of the available State services. The information supplied by the patients will be used for health care planning, research, legislation and funding by government agencies. If you need or want more information about the Registry Program and how you can help complete its work, please call Mrs. Zimmerman at (502) 583-6734. If you wish to write, the address is Suite 507, 224 E. Broadway, Louisville, Kentucky, 40202.

Susan Zimmerman, RN
Educational Coordinator
National Hemophilia Foundation
Kentuckiana Chapter



as one physician to another. . .







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Handy tear-out page of current officers of Kentucky specialty groups: 1981-82

Kentucky Society of Allergy and Clinical Immunology—President: Ronald P. Moyer, M.D. S.W. Jefferson Professional Bldg., 9820 S. Third Street Road, Louisville, KY 40272

Kentucky Society of Anesthesiologists—President: George E. Webb, M.D., 1452 Cherokee Road, Louisville, KY 40204

Kentucky Chapter, American College of Chest Physicians—President: Dennis J. McDonagh, M.D., Pulmonary Division, Dept. of Medicine, UKMC, Lexington, KY 40536

Kentucky Dermatological Society—President: Jim Zalla, M.D., 256 Main Street, Florence, KY 41042

Kentucky Chapter, American College of Emergency Physicians—President: James L. Combs, M.D., 1450 East Bend Road, Burlington, KY 41005

Kentucky Society of Otolaryngology, Head & Neck Surgery, Inc.—President: Gorden T. McMurry, M.D., 700 Childrens Foundation Bldg., Louisville, KY 40202

Kentucky Academy of Eye Physicians and Surgeons—President: William N. Offutt, IV., M.D., 135 East Maxwell Street, Lexington, KY 40508

Kentucky Society of Gastrointestinal Endoscopy—President: Nirmal S. Mann. M.D., 800 Zorn Avenue, Louisville, KY 40202

Kentucky Chapter, American Academy of Family Physicians—President: Ralph E. Whitehead, M.D., 8006 Old Shepherdsville Road, Lousiville, KY 40219

Kentucky Neurosurgical Society—President: Andrievs Dzenitis, M.D., 568 Medical Towers South, Louisville, KY 40202

KOGS—Kentucky Section ACOG—President: Terrell Mays, M.D., 914 W. Dixie, Elizabethtown, KY 42701

Kentucky Occupational Medicine Association—President: Ronald O. Naser, M.D., 415 Main Street, Brandenburg, KY 40108

Kentucky Orthopaedic Society—President: H. Brooks Morgan, M.D., 2537 Larkin Road, Lexington, KY 40503

Kentucky Society of Pathologists—President: Prue W. Kelly, M.D., Murray-Calloway County Hospital, 803 Popular Street, Murray, KY 42071

Kentucky Chapter, American Academy of Pediatrics—President: Thomas A. Courtenay, M.D., 518 Medical Towers, Louisville, KY 40202

Kentucky Chapter, American College of Physicians—President: Walter S. Coe, M.D., 207 Baptist East Doctors Bldg., Louisville, KY 40207

Kentucky Society for Plastic & Reconstructive Surgery—President: William L. Dowden, M.D., 1725 Harrodsburg Road, Lexington, KY 40504

Kentucky Psychiatric Association—President: Leah J. Dickstein, M.D., U of L Health Sciences Center, Louisville, KY 40292

Kentucky Association of Public Health Physicians—President: Dan Martin, M.D., Clinic Health Care Plan, Inc., P.O. Box 574, Madisonville, KY 42431

Kentucky Chapter, American College of Radiology—President: George F. Drasin, M.D., 217 East Chestnut Street, Louisville, KY 40202

Kentucky Chapter, American College of Surgeons—President: James P. Moss, M.D., 250 East Liberty Street, Louisville, KY 40202

Kentucky Urological Association—President: Mohammed Amin, M.D., Medical Center Office, Floyd & Gray Streets, Louisville, KY 40202

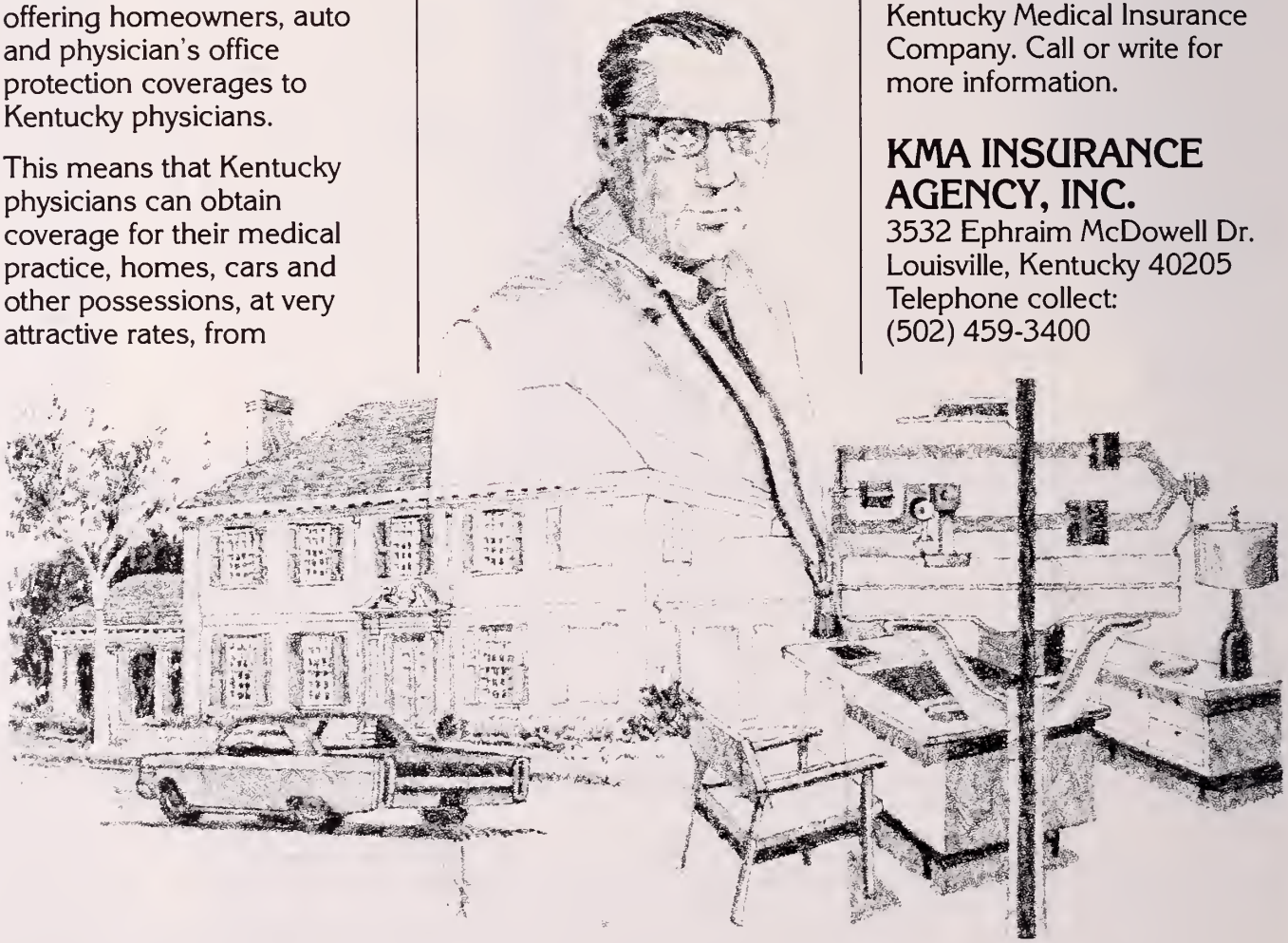
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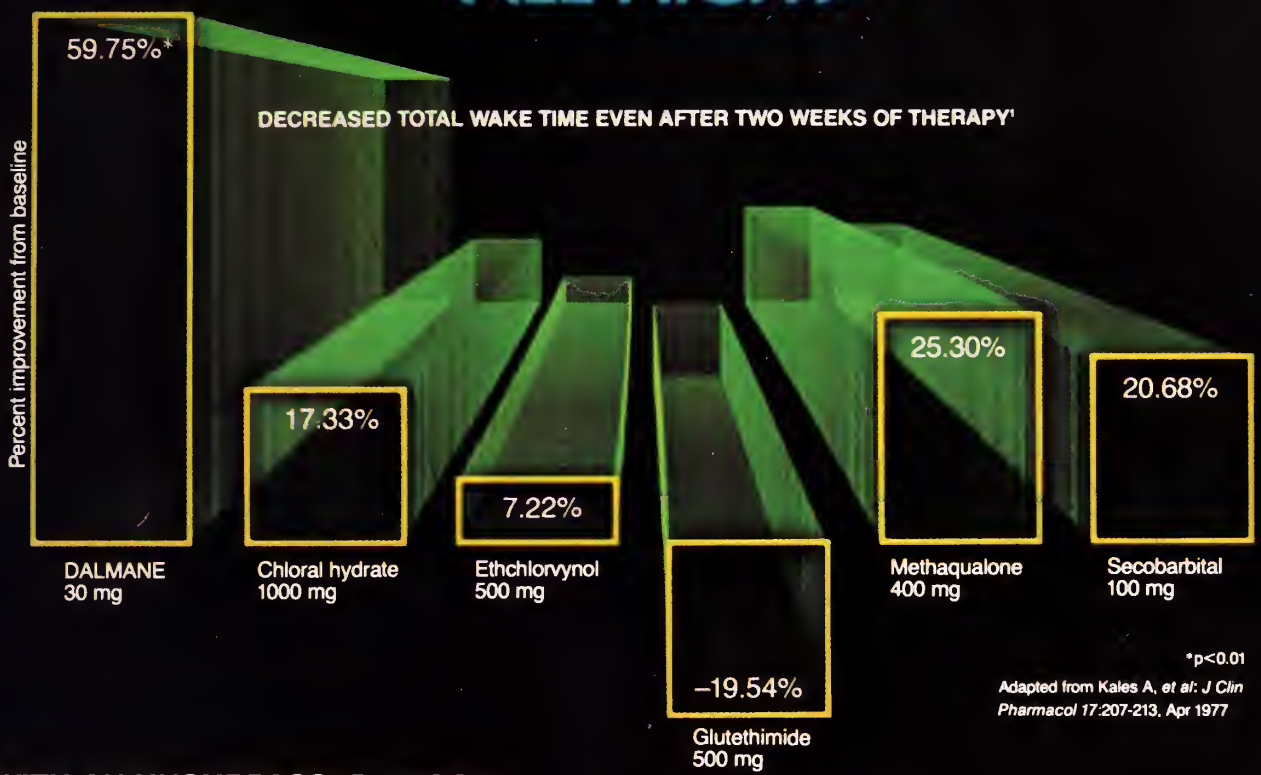
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*p<0.01

Adapted from Kales A, *et al*: *J Clin Pharmacol* 17:207-213, Apr 1977

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Relative safety was demonstrated in a large study of 2542 hospitalized medical patients. Only 3.1% of these patients reported adverse reactions–predominantly unwanted residual drowsiness. None of the reactions were considered serious by attending physicians.[3]

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Rapid sleep induction, within 17 minutes on average, sets the stage for insomnia relief. And, after discontinuation of Dalmane for periods ranging up to 14 nights, no worsening of sleep compared with baseline was observed.[4]

Should insomnia recur, the patient may require guidance in setting up a regular sleep program to help provide the optimum environment for the onset of natural sleep. If hypnotic therapy is required, it should be given for the shortest time at the lowest effective dose to achieve the desired goal.

Consider other medications the patient may be taking (including alcoholic beverages) and be aware of possible drug interactions. Please note that patients should be treated for underlying physical or psychological factors before therapy with a sleep medication is undertaken.

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flurazepam HCl/Roche

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DALMANE® ©IV
flurazepam HCl/Roche

One 15-mg capsule *h.s.*–recommended initial dosage for elderly or debilitated patients.
One 30-mg capsule *h.s.*–usual adult dosage
(15 mg may suffice in some patients)

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- Well tolerated[2]
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- Compatible with chronic warfarin therapy; no unacceptable fluctuation in prothrombin time reported[7,8]

UNLIKE NONSPECIFIC MEDICATIONS USED FOR SLEEP

Tricyclic antidepressants

–which are *not* sleep specific,[9] yet are sometimes used in nondepressed patients for sleep

–which can cause transient insomnia in the elderly[10]

–which can require careful monitoring in cardiovascular patients[10]

–which have strong anticholinergic effects[10]

Antihistamines

–which are *not* reliable sleep-inducing agents[11]

–which may produce stimulation instead[11]

–which have anticholinergic effects[11]

Major tranquilizers

–whose side effects may be troublesome for nonpsychotic patients[12]

–where tolerance for sedation appears rapidly[12]

Dalmane does not cause significant worsening of sleep beyond baseline levels upon discontinuation.[4]

References: **1.** Kales A, *et al: J Clin Pharmacol 17*:207-213, Apr 1977 **2.** Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ **3.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977 **4.** Kales A, *et al: Clin Pharmacol Ther 18*:356-363, Sep 1975 **5.** Moore JD, Weissman L: *J Clin Pharmacol 16*:241-244, May-Jun 1976 **6.** Spiegel HE: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ **7.** Robinson DS, Amidon EL: Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO, New York, Raven Press, 1973, pp 641-646 **8.** Warfarin Study: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ **9.** Baldessarini RJ: Drugs and the treatment of psychiatric disorders, chap 19, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6, New York, Macmillan Publishing Co Inc, 1980, pp 391-447 **10.** Cole JO, Davis JM: Antidepressant drugs, chap 31.2, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2, Baltimore, The Williams & Wilkins Company, vol 2, 1976, pp 1941-1956 **11.** Douglas WW: Histamine and 5-hydroxytryptamine (serotonin) and their antagonists, chap 26, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6, New York, Macmillan Publishing Co Inc, 1980, pp 609-646 **12.** Davis JM, Cole JO: Antipsychotic drugs, chap 31.1, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2, Baltimore, The Williams & Wilkins Company, vol 2, 1976, pp 1921-1940

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect.
Adults: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Application for Scientific Exhibits

1982 Annual Meeting **Kentucky Medical Association**

Hyatt Regency/Lexintgon Center **Lexington, Kentucky** **September 21, 22, 23**

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

 Address _____

 Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____
 (The draped booth has 4' side walls. This footage should not be included in backwall footage required.)
 SHELF DESIRED? _____ (Table 2' deep X width of backwall footage)

5. Will summray printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date _____ _____
Signature of Applicant

Fill Out and Mail to:

RICHARD A. KIELAR, M.D., Chairman
Scientific Exhibits Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1982.

- **KMA provides, without cost to the exhibitor, one 2 ft. Table as shelving, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 818 West Main Street, Louisville, Kentucky 40202.**
- ***Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.**
- **Transportation and erection costs are the responsibility of the exhibitor.**
- **Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.**
- **Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.**

ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

Twenty-Seventh Annual Clinical Conference

Specialty Problems in Primary Care

Presented by the

THE LEXINGTON CLINIC

and

THE LEXINGTON CLINIC FOUNDATION

1221 South Broadway, Lexington, Kentucky

April 1, 1982

Eastern Standard Time

8:30 a.m. Registration—First Floor
Coffee—Fifth Floor
Displays—Fourth Floor

MORNING SESSION

8:55 a.m. Welcome

Moderator: Thomas F. Whayne, Jr., M.D.

9:00 a.m. "Immuno Suppressive Treatment in Rheumatic Disease"
Charles R. Moore, M.D.

9:25 a.m. "Update in Diabetes Management"
L. Raymond Reynolds, M.D.

9:50 a.m. "Treatment of Endocrine Emergencies"
Thomas J. Goodenow, M.D.

10:15 a.m. Coffee Break—Fourth Floor
Displays—Fourth Floor

10:45 a.m. "Calcium Antagonists"
Allen L. Cornish III, M.D.

11:10 a.m. "Percutaneous Transluminal Coronary Angioplasty"
John C. Sartini, M.D.

11:35 a.m. "Viral Hepatitis—1982 Update"
Harold J. Fallon, M.D.
The Fifteenth Annual Carl Fortune Lecture

12:25 p.m. Lunch—Sixth Floor

AFTERNOON SESSION

Moderator: W. Lisle Dalton, M.D.

2:00 p.m. "The Office Exam for Peripheral Vascular Disease"
A. Joe Hiller, M.D.

2:25 p.m. "Evaluation of the Solitary Cervical Node"
J. Douglas Knoop, M.D.

2:50 p.m. Stretch

3:00 p.m. "Myopathies"
William C. Robertson, Jr., M.D.

3:35 p.m. "Laser Treatment in Glaucoma"
Richard A. Kielar, M.D.

3:50 p.m. ADJOURN

GUEST SPEAKER: Harold J. Fallon, M.D., William Branch Porter Professor, Chairman, Department of Medicine, Medical College of Virginia, Virginia Commonwealth University, NCV Station, Richmond, Virginia

As an organization accredited for continuing medical education, the Lexington Clinic certifies that this continuing medical education activity meets the criteria for 4½ credit hours in Category I toward the Physician's Recognition Award of the American Medical Association or similar credit.

This conference has been approved for 4½ hours of prescribed credit by the American Academy of Family Physicians.

Please send inquiries to: Mr. Phil Martin, 1221 S. Broadway, Lexington, Ky. 40504, 606-255-6841.

Report On The Northern Kentucky Cancer Treatment Center

Construction of the Northern Kentucky Cancer Treatment Center has been completed and the Center is beginning to serve patients. The Center is a regional source of comprehensive cancer treatment located at St. Luke Hospital in Ft. Thomas.

Its treatment services include radiation therapy and chemotherapy for out-patients, who make up the majority of patients treated, and hospitalized patients. External radiation therapy will be provided by a Siemens Mevatron 67, a 6 million volt linear accelerator. This is a major addition to the health resources of Northern Kentucky. Intercavity and interstitial therapy will also be used.

In addition to providing those major treatment modalities, the Center's staff includes personnel who can provide help with the social, emotional and financial problems cancer patients experience. A full-time social worker will be part of the staff, as well as a dietitian to do nutrition counseling and a staff pharmacist.

The Center is 11,000 square feet in size, built all on one level and for the most part underground. Its entrance looks over the hills of Northern Kentucky and provides a pleasant view from the lobby of the Center. The Center cost $5.3 million.

The Center is an important advance for the health care community of Northern Kentucky. In addition to serving the people in the northern tier of counties in Kentucky, its juxtaposition to the new interstate highway system made up of I-275 and I-471 makes it easily accessible to cancer patients in the eastern portion of Greater Cincinnati and Indiana.

Although the Center has both medical and radiation oncologists from St. Luke Hospital's medical staff on site, all physicians are encouraged to make use of the Center's services for their cancer patients. The Center recognizes the integral role of the primary physician coordinating all aspects of the patient's care program.

The Northern Kentucky Cancer Treatment Center grew out of a long-term effort by St. Luke Hospital to plan an effective means of dealing with the threat of cancer in Kentucky. St. Luke Hospital has operated a cancer treatment clinic, which gave chemotherapy, for the last four years. These patients are now being treated in the Center. In 1978, St. Luke Hospital looked at the incidence of cancer in its service areas and planned a Center that would meet those patient demands. Construction of the Center began in September 1980 and the Center began service a year later.

The Center is the focal point of a committed cancer program at St. Luke Hospital. One inpatient nursing unit has been staffed by nurses with addtional training and experience in oncology nursing. The hospital's social services and nursing staffs conduct an "I Can Cope" program in conjunction with the American Cancer Society. This free education and support program is one of two in Kentucky.

The hospital has formed an important linkage with the Sisters of the Good Shepherd. They will provide part of their building for low-cost overnight accommodations for cancer patients. The bedrooms and kitchens will allow cancer patients from more distant areas to undergo series of outpatient treatment without inconvenient drives each day. The facility, called Good Shepherd Villa, is located about one-half mile from the Northern Kentucky Cancer Treatment Center and will operate a shuttle van to transport patients to and from the Center for treatment.

The hospital staff has also been active in programs of public education about cancer prevention and detection and provides, through its pre-employment physical exams, screening and instruction about self-exams.

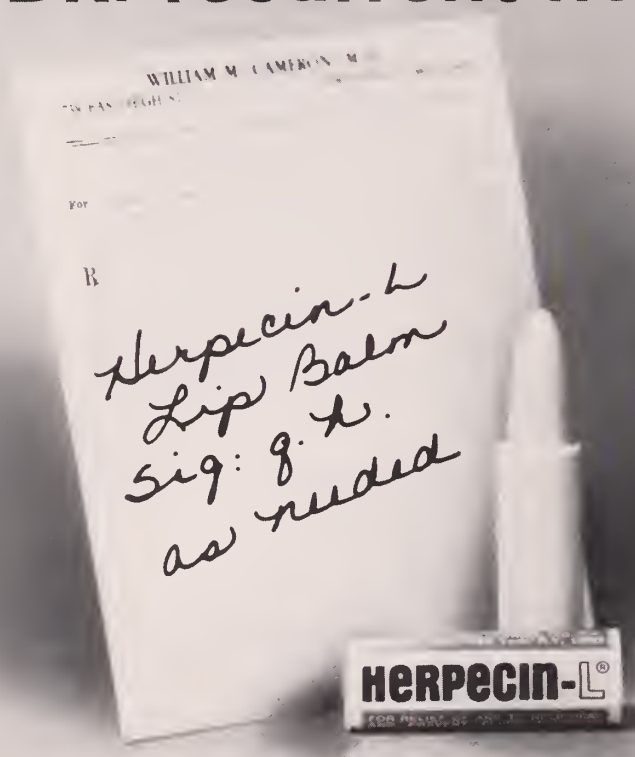
Formal dedication ceremonies are scheduled for October 18 at 2:00 p.m. to be followed by tours of the Center. Members of the Committee are invited to attend the dedication and tour the Center. St. Luke Hospital hopes that you will become familiar with its cancer treatment program and will share in the pride we feel in improving the state's resources for cancer treatment.

MEMBERS IN THE NEWS

Samuel A. Overstreet, M.D., Louisville, selected the University of Louisville School of Medicine as the recipient of a $1,000 grant from the Schering Corporation.

Doctor Overstreet was one of the physicians selected who participated in a study of U.S. physicians prescribing habits. Nine other physicians were also chosen randomly.

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"EMERGENCY MEDICINE"
1982 KMA Annual Meeting

Hyatt Regency, Lexington

1982 KMA Annual Meeting will be in Lexington, September 20-23. After attending scientific sessions and specialty group meetings, physicians and their families are invited to visit other attractions in the Lexington area. The Shaker Village of Pleasant Hill offers a self-guided tour of 27 original 19th century Shaker structures, craft demonstrations, overnight accommodations in the original buildings and a dining room serving Kentucky country cooking. Pleasant Hill has a year-round calendar of events.

Emergency Medical Care Seminar

June 8, 9 & 10, 1982

Executive West

Louisville, KY



William T. Applegate, Executive Director at the Kentucky Medical Association, was elected to the Board of Directors of the Professional Convention Management Association (PCMA) at their January convention in Washington, D.C.

PCMA is a prestigious organization that generates over a half billion dollars of convention business annually. Its purpose is to assist members in conducting their own conventions.

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EMERGENCY PHYSICIANS $80,000-$90,000. Medical Associates, Inc. is actively seeking new emergency room contracts and is in need of additional full time physicians both now and for the future in Kentucky. Full time positions will have a yearly compensation of $80,000 to $90,000. Currently, we also are interviewing candidates for directorships with the group. Annual compensation will be in the $100,000 range. If you are interested in one of these positions, call Paul T. Brizendine, M.D. or Frank H. Poschinger at 606-638-9663 or write to Medical Associates, Inc., P.O. Box 729, Louisa, Kentucky 41230.

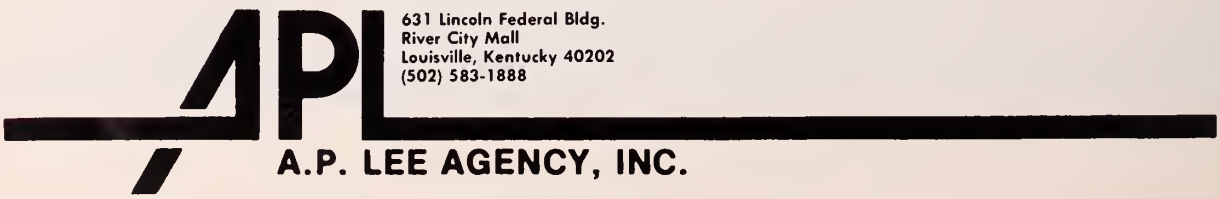
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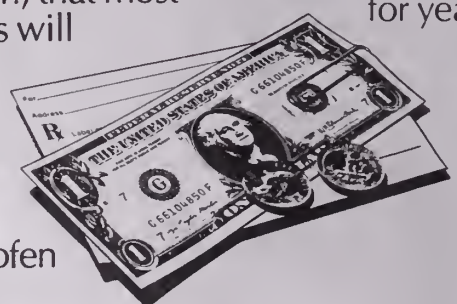
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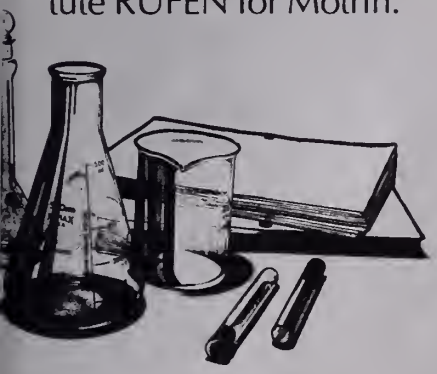
ARTHRITIC PATIENTS IBUPROFEN THERAPY.

You first came to know it as Motrin (ibuprofen), manufactured by Upjohn.

Now, as we have established facilities in America, we hope you'll come to know Boots brand name for ibuprofen as RUFEN.

BIOEQUIVALENCY? OF COURSE.*

That's why you may substitute RUFEN for Motrin.



ALSO: A BOOTS CONTRIBUTION TO ARTHRITIS RESEARCH WITH EVERY REBATE.†

A 25¢ contribution per rebate is built directly into the RUFEN program. And with thousands of prescriptions anticipated for RUFEN 400 mg each year, the annual potential for arthritis research is enormous.





Rufen® (ibuprofen)

*Data on file.

†Contributions made to: International League Against Rheumatism.

WHEN YOU'RE WRITING YOUR NEXT PRESCRIPTION FOR IBUPROFEN, PLEASE REMEMBER:

RUFEN® OFFERS A $1.50 REBATE DIRECT TO YOUR PATIENTS ON EVERY BOTTLE OF 100 TABLETS OF RUFEN 400 MG.

RUFEN COSTS YOUR PATIENTS LESS TO BEGIN WITH.

RUFEN CONTRIBUTES 25¢ PER REBATE TO ARTHRITIS RESEARCH.

RUFEN IS NOT A GENERIC...BOOTS IBUPROFEN IS THE ORIGINAL.

RUFEN (IBUPROFEN) IS BIOEQUIVALENT TO MOTRIN® (IBUPROFEN).*

I hope we've given you several good reasons to remember RUFEN the next time you prescribe ibuprofen.

If we haven't, or if you'd like to know more about Boots Pharmaceuticals or this program, please don't hesitate to drop me a line. Or call us directly at our toll-free number: (800) 551-8119. Louisiana residents, call (800) 282-8671.

To ensure that your patients receive the benefits of the Rufen program, *be sure to specify* "D.A.W.," "No Sub," or "Medically Necessary," as required by the laws of your state.

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John D. Bryer, President
Boots Pharmaceuticals, Inc.

Boots Pharmaceuticals, Inc.
6540 LINE AVENUE, SHREVEPORT, LOUISIANA 71106

Pioneers in medicine for the family

*Data on file.

5/81

RF-009

RUFEN®
(ibuprofen/Boots)

(For full prescribing information, see package brochure.)

RUFEN® Tablets
(ibuprofen)

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain. Do not exceed 2,400 mg per day.

CAUTION: Federal law prohibits dispensing without prescription.

Boots Pharmaceuticals, Inc.
Shreveport, Louisiana 71106

Bactrim™
(trimethoprim and sulfamethoxazole)
succeeds

Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



in recurrent UTI...
a continuing record of high clinical effectiveness against common uropathogens

in acute otitis media in children...
effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
clears the sputum and lowers its volume...on *b.i.d.* dosage

in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

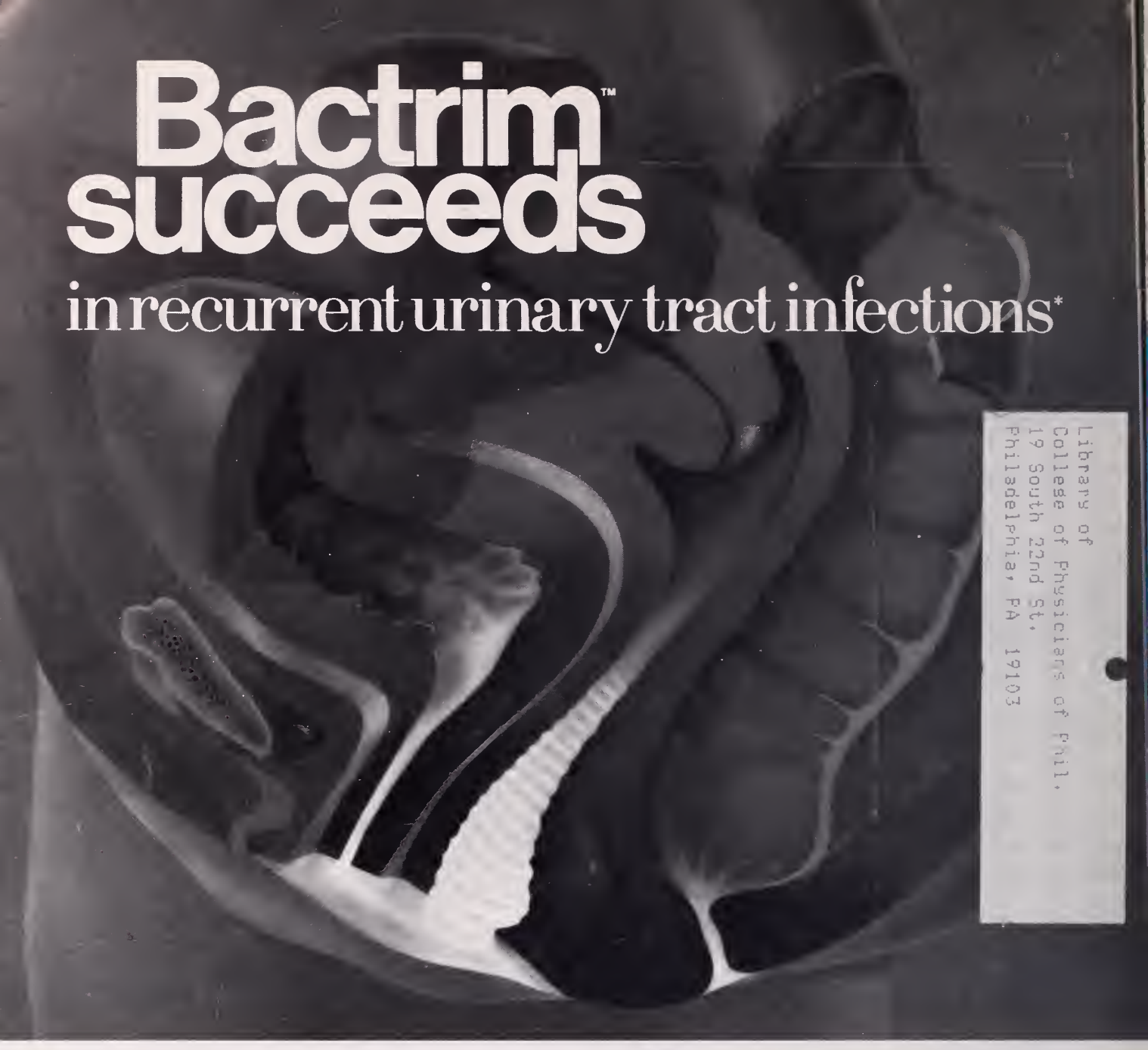
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

ROCHE®
ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Bactrim™ succeeds

in recurrent urinary tract infections*



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College of Physicians of Phil.
19 South 22nd St.
Philadelphia, PA 19103

from site to source

Bactrim continues to demonstrate high clinical effectiveness in recurrent urinary tract infections. Bactrim reaches effective levels in urine, serum, and renal tissue[1]...the trimethoprim component diffuses into vaginal secretions in bactericidal concentrations[1]... and in the fecal flora, Bactrim effectively suppresses Enterobacteriaceae[1,2] with little resulting emergence of resistant organisms.

1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

Bactrim™ DS

160 mg trimethoprim and 800 mg sulfamethoxazole

DOUBLE STRENGTH TABLETS

maximizes results with B.I.D. convenience

ROCHE®

* due to susceptible strains of indicated organisms

Please see previous page for summary of product information.

STACKS

- Big-Heart Syndrome
- Retinal Vein Occlusion
- Carcinoid Tumor of the Breast
- Esophageal Motility

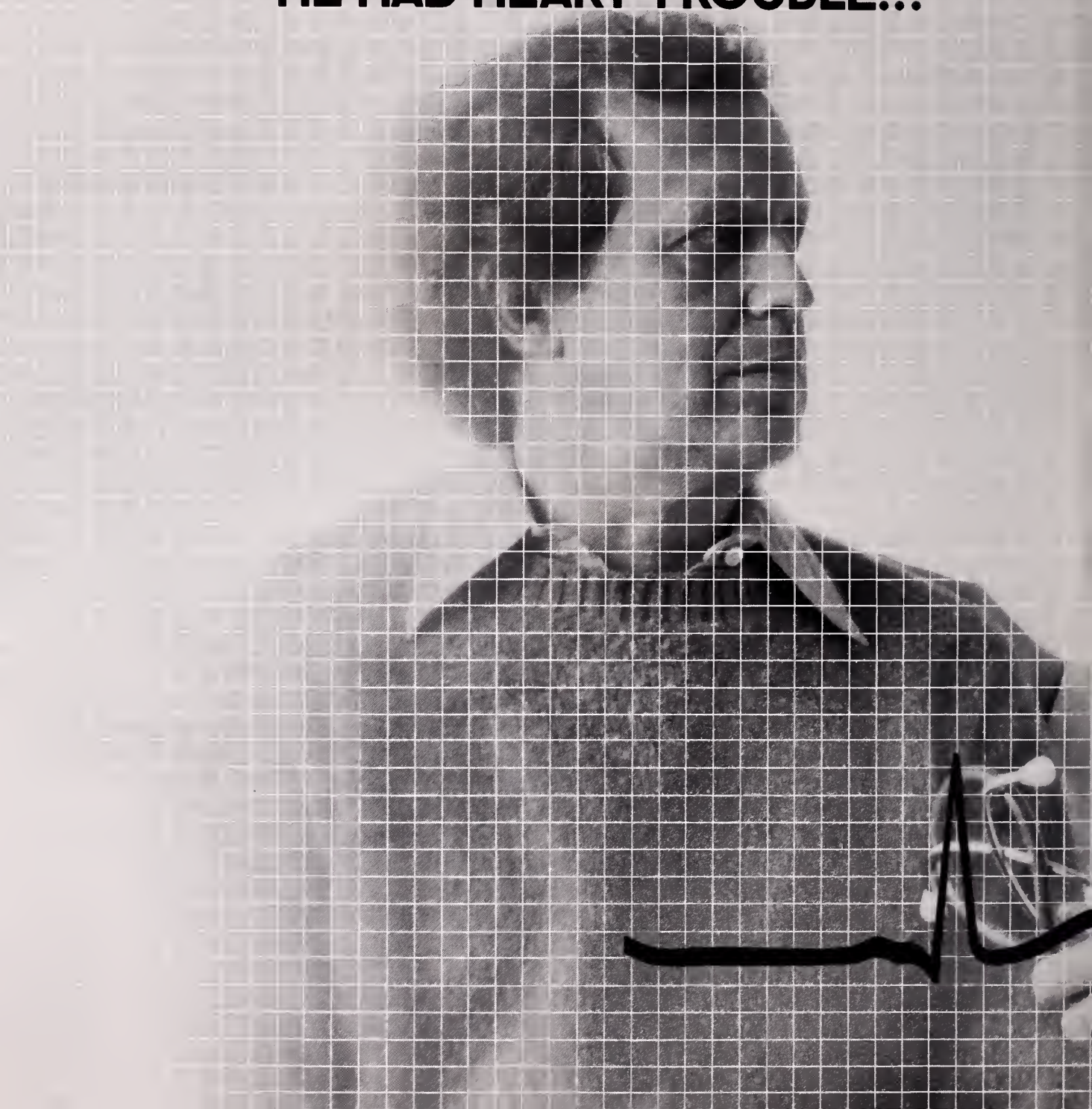
March 1982
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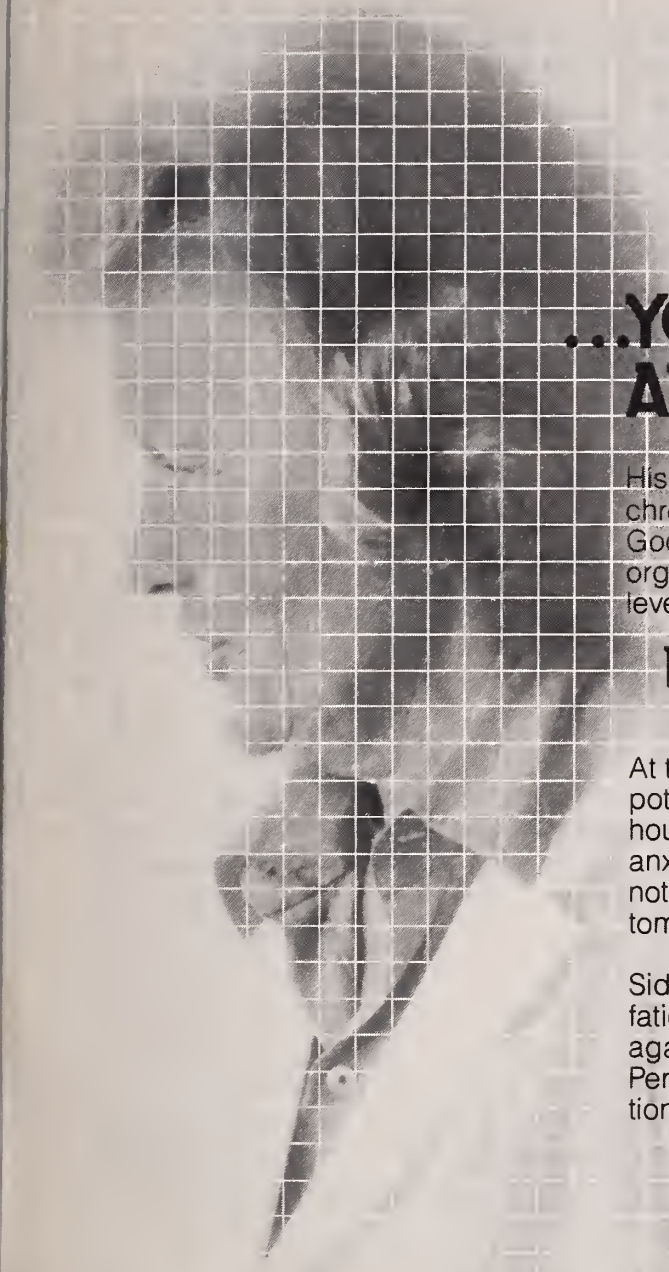
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The Journal Of The Kentucky Medical Association

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THE PATIENT THINKS HE HAS HEART TROUBLE...





...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

For rapid relief you prescribe Valium (diazepam/Roche)

At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

VALIUM® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED THE PATIENT NEEDS IT

ROCHE®

Please see summary of product information on the following page.

VALIUM®(diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma, may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500,* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

*Supplied by Roche Products Inc., Manati, Puerto Rico 00701
†Supplied by Roche Laboratories, Division of Hoffmann-La Roche Inc., Nutley, New Jersey 07110

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A Certified Public Accountant can ease the burden of your most important decisions.

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more than a title, it's a profession
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The University of Kentucky Diabetes Center and Kentucky Diabetes Foundation will present a three-day approved continuing medical education program for Eli Lilly, "Recent Advances in Diabetes Care," April 15-17, 1982. The symposium will take place at the Marriott Inn, Lexington, Kentucky. For information contact: Peggy Collins, Program Coordinator, 2108 Nicholasville Road, Lexington, Kentucky 40503; (606) 233-5473.

The Journal Of The Kentucky Medical Association

USPS 280-700

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Pfizer Laboratories Announces

THE FIRST ORAL CALCIUM CHANNEL BLOCKER FOR THE MANAGEMENT OF ANGINA PECTORIS

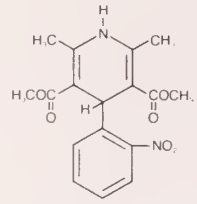
NEW PROCARDIA® (NIFEDIPINE) *Capsules 10 mg*

Please see PROCARDIA® *prescribing information on next page.*

PROCARDIA® CAPSULES
nifedipine

For Oral Use

DESCRIPTION: PROCARDIA (nifedipine) is an antianginal drug belonging to a new class of pharmacological agents, the calcium channel blockers. Nifedipine is 3,5-pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(2-nitrophenyl)-, dimethyl ester, $C_{17}H_{18}N_2O_6$, and has the structural formula:



Nifedipine is a yellow crystalline substance, practically insoluble in water but soluble in ethanol. It has a molecular weight of 346.3. PROCARDIA CAPSULES are formulated as soft gelatin capsules for oral administration each containing 10 mg nifedipine.

CLINICAL PHARMACOLOGY: PROCARDIA (nifedipine) is a calcium ion influx inhibitor (slow channel blocker or calcium ion antagonist) and inhibits the transmembrane influx of calcium ions into cardiac muscle and smooth muscle. The contractile processes of cardiac muscle and vascular smooth muscle are dependent upon the movement of extracellular calcium ions into these cells through specific ion channels. PROCARDIA selectively inhibits calcium ion influx across the cell membrane of cardiac muscle and vascular smooth muscle without changing serum calcium concentrations.

Mechanism of Action: The precise means by which this inhibition relieves angina has not been fully determined, but includes at least the following two mechanisms:

1) **Relaxation and prevention of coronary artery spasm:** PROCARDIA dilates the main coronary arteries and coronary arterioles, both in normal and ischemic regions, and is a potent inhibitor of coronary artery spasm, whether spontaneous or ergonovine-induced. This property increases myocardial oxygen delivery in patients with coronary artery spasm, and is responsible for the effectiveness of PROCARDIA in vasospastic (Prinzmetal's or variant) angina. Whether this effect plays any role in classical angina is not clear, but studies of exercise tolerance have not shown an increase in the maximum exercise rate-pressure product, a widely accepted measure of oxygen utilization. This suggests that, in general, relief of spasm or dilation of coronary arteries is not an important factor in classical angina.

2) **Reduction of oxygen utilization:** PROCARDIA regularly reduces arterial pressure at rest and at a given level of exercise by dilating peripheral arterioles and reducing the total peripheral resistance (afterload) against which the heart works. This unloading of the heart reduces myocardial energy consumption and oxygen requirements and probably accounts for the effectiveness of PROCARDIA in chronic stable angina.

Pharmacokinetics and Metabolism: PROCARDIA is rapidly and fully absorbed after oral administration. The drug is detectable in serum 10 minutes after oral administration, and peak blood levels occur in approximately 30 minutes. It is highly bound by serum proteins. PROCARDIA is extensively converted to inactive metabolites and approximately 80% of PROCARDIA and metabolites are eliminated via the kidneys. The half-life of nifedipine in plasma is approximately two hours. There is no information on the effects of renal or hepatic impairment on excretion or metabolism of PROCARDIA.

Hemodynamics: Like other slow channel blockers, PROCARDIA exerts a negative inotropic effect on isolated myocardial tissue. This is rarely, if ever, seen in intact animals or man, probably because of reflex responses to its vasodilating effects. In man, PROCARDIA causes decreased peripheral vascular resistance and a fall in systolic and diastolic pressure, usually modest (5–10 mm Hg systolic), but sometimes larger. There is usually a small increase in heart rate, a reflex response to vasodilation. Measurements of cardiac function in patients with normal ventricular function have generally found a small increase in cardiac index without major effects on ejection fraction, left ventricular end diastolic pressure (LVEDP) or volume (LVEDV). In patients with impaired ventricular function, most acute studies have shown some increase in ejection fraction and reduction in left ventricular filling pressure.

Electrophysiologic Effects: Although, like other members of its class, PROCARDIA decreases sinoatrial node function and atrioventricular conduction in isolated myocardial preparations, such effects have not been seen in studies in intact animals or in man. In formal electrophysiologic studies, predominantly in patients with normal conduction systems, PROCARDIA has had no tendency to prolong atrioventricular conduction, prolong sinus node recovery time, or slow sinus rate.

INDICATIONS AND USAGE: I. Vasospastic Angina: PROCARDIA (nifedipine) is indicated for the management of vasospastic angina confirmed by any of the following criteria: 1) classical pattern of angina at rest accompanied by ST segment elevation, 2) angina or coronary artery spasm provoked by ergonovine, or 3) angiographically demonstrated coronary artery spasm. In those patients who have had angiography, the presence of significant fixed obstructive disease is not incompatible with the diagnosis of vasospastic angina, provided that the above criteria are satisfied. PROCARDIA may also be used where the clinical presentation suggests a possible vasospastic component but where vasospasm has not been confirmed, e.g., where pain has a variable threshold on exertion or in unstable angina where electrocardiographic findings are compatible with intermittent vasospasm, or when angina is refractory to nitrates and/or adequate doses of beta blockers.

II. Chronic Stable Angina (Classical Effort-Associated Angina): PROCARDIA is indicated for the management of chronic stable angina (effort-associated angina) without evidence of vasospasm in patients who remain symptomatic despite adequate doses of beta blockers and/or organic nitrates or who cannot tolerate those agents.

In chronic stable angina (effort-associated angina) PROCARDIA has been effective in controlled trials of up to eight weeks duration in reducing angina frequency and increasing exercise tolerance, but confirmation of sustained effectiveness and evaluation of long-term safety in these patients are incomplete.

Controlled studies in small numbers of patients suggest concomitant use of PROCARDIA and beta-blocking agents may be beneficial in patients with chronic stable angina, but available information is not sufficient to predict with confidence the effects of concurrent treatment, especially in patients with compromised left ventricular function or cardiac conduction abnormalities. When introducing such concomitant therapy, care must be taken to monitor blood pressure closely since severe hypotension can occur from the combined effects of the drugs. (See Warnings.)

CONTRAINDICATIONS: Known hypersensitivity reaction to PROCARDIA.

WARNINGS: Excessive Hypotension: Although in most patients, the hypotensive effect of PROCARDIA is modest and well tolerated, occasional patients have had excessive and poorly tolerated hypotension. These responses have usually occurred during initial titration or at the time of subsequent upward dosage adjustment, and may be more likely in patients on concomitant beta blockers.

Increased Angina/Beta Blocker Withdrawal: Occasional patients have developed well documented increased frequency, duration or severity of angina on starting PROCARDIA or at the time of dosage increases. The mechanism of this response is not established but could result from decreased coronary perfusion associated with decreased diastolic pressure with increased heart rate, or from increased demand resulting from increased heart rate alone.

Patients recently withdrawn from beta blockers may develop a withdrawal syndrome with increased angina, probably related to increased sensitivity to catecholamines. Initiation of PROCARDIA treatment will not prevent this occurrence and might be expected to exacerbate it by provoking reflex catecholamine release. There have been occasional reports of increased angina in a setting of beta blocker withdrawal and PROCARDIA initiation. It is important to taper beta blockers if possible, rather than stopping them abruptly before beginning PROCARDIA.

Congestive Heart Failure: Rarely, patients usually receiving a beta blocker have developed heart failure after beginning PROCARDIA. Patients with tight aortic stenosis may be at greater risk for such an event, as the unloading effect of PROCARDIA would be expected to be of less benefit to these patients, owing to their fixed impedance to flow across the aortic valve.

PRECAUTIONS: General: Hypotension: Because PROCARDIA decreases peripheral vascular resistance, careful monitoring of blood pressure during the initial administration and titration of PROCARDIA is suggested. Close observation is especially recommended for patients already taking medications that are known to lower blood pressure. See Warnings.

Peripheral edema: Mild to moderate peripheral edema, typically associated with arterial vasodilation and not due to left ventricular dysfunction, occurs in about one in ten patients treated with PROCARDIA. This edema occurs primarily in the lower extremities and usually responds to diuretic therapy. With patients whose angina is complicated by congestive heart failure, care should be taken to differentiate this peripheral edema from the effects of increasing left ventricular dysfunction.

Drug interactions: Beta-adrenergic blocking agents: See Indications and Warnings. Experience in over 1400 patients in a non-comparative clinical trial has shown that concomitant administration of PROCARDIA and beta-blocking agents is usually well tolerated, but there have been occasional literature reports suggesting that the combination may increase the likelihood of congestive heart failure, severe hypotension or exacerbation of angina.

Long-acting nitrates: PROCARDIA may be safely co-administered with nitrates, but there have been no controlled studies to evaluate the antianginal effectiveness of this combination.

Carcinogenesis, mutagenesis, impairment of fertility: Nifedipine was administered orally to rats for two years and was not shown to be carcinogenic. When given to rats prior to mating, nifedipine caused reduced fertility at a dose approximately 30 times the maximum recommended human dose. *In vivo* mutagenicity studies were negative.

Pregnancy: Pregnancy category C. Nifedipine has been shown to be teratogenic in rats when given in doses 30 times the maximum recommended human dose. Nifedipine was embryotoxic (increased fetal resorptions, decreased fetal weight, increased stunted forms, increased fetal deaths, decreased neonatal survival) in rats, mice and rabbits at doses of from 3 to 10 times the maximum recommended human dose. In pregnant monkeys, doses 2/3 and twice the maximum recommended human dose resulted in small placentas and underdeveloped chorionic villi. In rats, doses three times the maximum human dose and higher caused prolongation of pregnancy. There are no adequate and well-controlled studies in pregnant women. PROCARDIA should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

ADVERSE REACTIONS: In multiple-dose U.S. and foreign-controlled studies in which adverse reactions were reported spontaneously, adverse effects were frequent but generally not serious and rarely required discontinuation of therapy or dosage adjustment. Most were expected consequences of the vasodilator effects of PROCARDIA.

Adverse Effect	PROCARDIA (%) (N = 226)	Placebo (%) (N = 235)
Dizziness, light-headedness, giddiness	27	15
Flushing, heat sensation	25	8
Headache	23	20
Weakness	12	10
Nausea, heartburn	11	8
Muscle cramps, tremor	8	3
Peripheral edema	7	1
Nervousness, mood changes	7	4
Palpitation	7	5
Dyspnea, cough, wheezing	6	3
Nasal congestion, sore throat	6	8

There is also a large uncontrolled experience in over 2100 patients in the United States. Most of the patients had vasospastic or resistant angina pectoris, and about half had concomitant treatment with beta-adrenergic blocking agents. The most common adverse events were the same ones seen in the controlled trials, with dizziness or light-headedness, peripheral edema, nausea, weakness, headache and flushing each occurring in about 10% of patients, transient hypotension in about 5%, palpitation in about 2% and syncope in about 0.5%. Syncopal episodes did not recur with reduction in the dose of PROCARDIA or concomitant antianginal medication. Very rarely, introduction of PROCARDIA therapy was associated with an increase in anginal pain, possibly due to associated hypotension.

Several of these side effects appear to be dose related. Peripheral edema occurred in about one in 25 patients at doses less than 60 mg per day and in about one patient in eight at 120 mg per day or more. Transient hypotension, generally of mild to moderate severity and seldom requiring discontinuation of therapy, occurred in one of 50 patients at less than 60 mg per day and in one of 20 patients at 120 mg per day or more.

In addition, 2% or fewer of patients reported the following: **Respiratory:** Nasal and chest congestion, shortness of breath. **Gastrointestinal:** Diarrhea, constipation, cramps, flatulence. **Musculoskeletal:** Inflammation, joint stiffness, muscle cramps. **CNS:** Shakiness, nervousness, jitteriness, sleep disturbances, blurred vision, difficulties in balance. **Other:** Dermatitis, pruritus, urticaria, fever, sweating, chills, sexual difficulties.

In addition, more serious adverse events were observed, not readily distinguishable from the natural history of the disease in these patients. It remains possible, however, that some or many of these events were drug related. Myocardial infarction occurred in about 4% of patients and congestive heart failure or pulmonary edema in about 2%. Ventricular arrhythmias or conduction disturbances each occurred in fewer than 0.5% of patients.

In a subgroup of over 1000 patients receiving PROCARDIA with concomitant beta blocker therapy, the pattern and incidence of adverse experiences was not different from that of the entire group of PROCARDIA treated patients (see **Precautions**).

In a subgroup of patients with a diagnosis of congestive heart failure as well as angina, dizziness or light-headedness, peripheral edema, headache or flushing each occurred in one in eight patients. Hypotension occurred in about one in 20 patients. Syncope occurred in approximately one patient in 250. Myocardial infarction or symptoms of congestive heart failure each occurred in about one patient in 15. Atrial or ventricular dysrhythmias each occurred in about one patient in 150.

Laboratory tests: Rare, mild to moderate, transient elevations of enzymes such as alkaline phosphatase, CK, LDH, SGOT, and SGPT have been noted, and a single incident of significantly elevated transaminases and alkaline phosphatase was seen in a patient with a history of gall bladder disease after about eleven months of nifedipine therapy. The relationship to PROCARDIA therapy is uncertain. These laboratory abnormalities have already been associated with clinical symptoms. Cholestasis, possibly due to PROCARDIA therapy, has been reported twice in the extensive world literature.

OVERDOSAGE: Although there is no well documented experience with PROCARDIA overdosage, available data suggest that gross overdosage could result in excessive peripheral vasodilation with subsequent marked and probably prolonged systemic hypotension. Clinically significant hypotension due to PROCARDIA overdosage calls for active cardiovascular support including monitoring of cardiac and respiratory function, elevation of extremities, and attention to circulating fluid volume and urine output. A vasoconstrictor (such as norepinephrine) may be helpful in restoring vascular tone and blood pressure, provided that there is no contraindication to its use. Clearance of PROCARDIA would be expected to be prolonged in patients with impaired liver function. Since PROCARDIA is highly protein-bound, dialysis is not likely to be of benefit.

DOSAGE AND ADMINISTRATION: The dosage of PROCARDIA needed to suppress angina and that can be tolerated by the patient must be established by titration. Excessive doses can result in hypotension.

The starting dose is one 10 mg capsule, swallowed whole, 3 times day. The usual effective dose range is 10–20 mg three times daily. Some patients, especially those with evidence of coronary artery spasm, respond only to higher doses, more frequent administration, or both. In such patients, doses of 20–30 mg three or four times daily may be effective. Doses above 120 mg daily are rarely necessary. More than 180 mg per day is not recommended.

In most cases, PROCARDIA titration should proceed over a 7–14 day period so that the physician can assess the response to each dose level and monitor the blood pressure before proceeding to higher doses.

If symptoms so warrant, titration may proceed more rapidly provided that the patient is assessed frequently. Based on the patient's physical activity level, attack frequency, and sublingual nitroglycerin consumption, the dose of PROCARDIA may be increased from 10 mg t.i.d. to 20 mg t.i.d. and then to 30 mg t.i.d. over a three-day period.

In hospitalized patients under close observation, the dose may be increased in 10 mg increments over four to six-hour periods as required to control pain and arrhythmias due to ischemia. A single dose should rarely exceed 30 mg.

No "rebound effect" has been observed upon discontinuation of PROCARDIA. However, if discontinuation of PROCARDIA is necessary, sound clinical practice suggests that the dosage should be decreased gradually with close physician supervision.

Co-Administration with Other Antianginal Drugs: Sublingual nitroglycerin may be taken as required for the control of acute manifestations of angina, particularly during PROCARDIA titration. See **Precautions, Drug Interactions** for information on co-administration of PROCARDIA with beta blockers or long-acting nitrates.

HOW SUPPLIED: Each orange, soft gelatin PROCARDIA Capsule contains 10 mg of nifedipine. PROCARDIA Capsules are supplied in amber glass bottles of 100 capsules (NDC 0069-2600-66).

The capsules should be protected from light and moisture and stored at controlled room temperature 59° to 77°F (15° to 25°C) in the manufacturer's original container.

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Pfizer LABORATORIES DIVISION
PFIZER INC NEW YORK N Y 10017



PRESIDENT'S PAGE

Pay Me Now—or—Pay Me Later

A RECENT television commercial depicts a mechanic with a dirty oil filter in one hand and a statement for repair charges in the other. With a big smile and a chuckle in his voice he intones the heart of the commercial—"Pay Me Now or Pay Me Later." With the economy in a tailspin and new product costs extremely expensive, preventive maintenance is a byword in the commercial world. For years physicians and the health care industry have implored Americans to practice good health habits and maintain wellness. Carrying this concept one step further, participation in organized medicine can be construed as "preventive maintenance" for the profession.

Seldom does a day go by that some hostile regulation, health planning proposal or potential legislative action presents itself under the guise of "consumer protection." I shall not belabor you with specific examples or condescendingly explain "what we've done for you today." I can say with some assurance that the very specter of organized medicine has deterred federal and state bureaucracies from incorporating physicians into public service.

On the national scene, the AMA has been characterized as one of the most potent forces in the Nation's Capital. In addition, a recent survey of Kentucky Legislators indicated that KMA is one of the five most powerful voices in Kentucky.

The respect we hold has not come easily nor has it occurred without cost. The shop-worn phrase, "Eternal Vigilance," is as applicable today as it was when organized medicine began. We do not proclaim perfection nor do we infer that medicine's positions have always been right. Those of us who were around in the middle 60's and the 70's recall the spate of legislative boondoggles and bureaucratic muddling that attempted to reduce medicine's effectiveness. To some degree they succeeded temporarily by angering members of our profession to such an extent that a division in our ranks occurred.

The setbacks for organized medicine during this turbulent period struck at the very heart of the medical profession. For the first time in history we struggled for our very existence. Outside forces not only achieved success in the regulatory and legislative arena, but carefully and systematically manipulated the profession into its own worst enemy. "Specialty Societies," rather than uniting, grasped for straws and sought self-interest first. Conservative and liberal elements of the profession bitterly clashed over positions and legislative tactics. The frustrations and defeats we suffered during those dark days resulted not from our divergent positions, but by our inability to combat the liberal political forces which captured the minds and hearts of the general public. We eventually recovered and quietly and methodically reasserted ourselves as leaders in the health care industry. Political realities were not ignored, and politics ceased to be a dirty word in physicians' circles.

Membership in organized medicine and your Political Action Committee is a professional investment and a deterrent to the insidious forces which promote supermarket medicine. In addition, it offers each of us the opportunity to participate and have a voice in its affairs and provides a framework for maintaining the profession and its image. We have been extremely successful over the long haul in affecting scientific, social, economic and political processes to the extent that the American public receives the quality medical care it expects.

President's Page

The history of the KMA resounds with positive accomplishments which have benefitted the public and the profession. We do not apologize for our activities; a cursory glance of KMA activities readily points out that over 50% of our committee functions are devoted to protecting the public and to providing a forum for those who feel they have been aggrieved.

In the near future the *Journal of the Kentucky Medical Association* will include a roster of members of this Association. Perhaps the most profound statement resulting from the publication of KMA membership will occur **not** by a listing of members, but by the notable omission of many of our peers and friends. Either for personal or economic reasons they have chosen not to participate and have generated an additional burden which present paying members must share.

To our friends and peers who have opted out, we urge your reconsideration. To those physicians who have disagreed with specific positions, we remind you that changes can be made only within the structure of organized medicine, not from without. With additional participation, we can increase our effectiveness and provide the leadership and the stability to maintain our profession. Without unity we can expect nothing less than total government and bureaucratic control and an end to the medical practice we presently enjoy. We have no plans to utilize commercials for recruitment purposes, but if our philosophy ever changes our message could well be—PAY ME NOW—OR—PAY ME LATER.

Ballard W. Cassady, M.D.
KMA President

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SCIENTIFIC

Clinico-Pathological Conference: "The Big-Heart Syndrome"

CHARLES F. BOWLDS, M.D., LEO G. HORAN, M.D. and W. L. BROGHAMER, M.D.

Cardiomyopathy may be due to primary or secondary causes. The purpose of this paper is to review the analysis of a case of cardiomegaly/cardiomyopathy/congestive heart failure and sudden death. The case is presented as a clinicopathologic conference with review of the autopsy findings.

THE patient was a 39-year-old white man whose chief complaint on his first admission in May 1974 was weakness and loss of weight. He was in his normal state of good health until one month prior to admission when he noted gradually increasing weakness and shortness of breath on exertion. The dyspnea on exertion had reached the point where he was unable to climb one flight of stairs and couldn't perform his duties as a mail truck driver. Three weeks prior to admission, he began to have one to two "fainting" spells a day, always associated with exertion. The patient had noted a dull pressure sensation in his anterior chest on both the right and left precordium, without radiation, occurring on exertion and relieved by complete rest. He also had swelling of his ankles, but neither paroxysmal nocturnal dyspnea nor orthopnea. The patient had lost approximately 30 pounds of weight over the month prior to admission and had experienced decreased appetite. For three weeks before admission he had six to eight loose stools a day. One week prior to admission he was seen by a physician who found "elevated liver enzymes, CPK, and bilirubin." The patient was started on digoxin, furosemide, allopurinol and hydroxyzine hydrochloride.

In his past medical history there was no known hypertension or diabetes mellitus. At age 21, while in the U.S. Army, he had an illness diagnosed as rheumatic fever, characterized by stiffness of joints, weakness, "meningitis," and hematuria. The patient associated the onset of bilateral hearing deficits to this illness. There was no other known heart disease. There were no previous hospitalizations or surgical procedures. He recalled mumps as a child, and denied known allergies. His mother had adult onset diabetes mellitus. The patient denied use of alcohol or tobacco. His review of systems was negative except for his symptoms of the present illness and bilateral hearing deficits.

Physical exam revealed a plethoric, asthenic white man appearing chronically ill but in no acute distress. The patient was afebrile. His blood pressure in the recumbent position was 125/90 m.m.

Presented as an Internal Medicine Grand Rounds, University of Louisville, 1980.



Fig. 1: Admission chest x-ray, posterior-anterior view and left lateral view.

Hg. in both arms. The thoracic configuration was normal and his lungs were clear on auscultation. No clubbing or cyanosis was noted. The cardiac rhythm was irregular; SI and S2 were of normal intensity. An accentuated S4 was heard and the PMI was in the fourth intercostal space, two centimeters lateral to the midclavicular line. There were questionable left parasternal and left ventricular lifts. No thrills were noted. The peripheral pulses were brisk and bilaterally equal. The rest of the physical exam was unremarkable except for impaired VIII nerve function due to bilaterally impaired air conduction.

Admission laboratory data showed his Hgb. was 18.7 gm/100 ml, Hct. 58.5 vol. % with a WBC 9,700, 69% neutrophils, 1% bands, 20% lymph, 1% eosinophils, 9% monocytes. Arterial blood gases on room air were pH 7.485, pO_2 105 mm. Hg, pCO_2 30 mm. Hg. His chest x-ray was interpreted as showing cardiomegaly with partially compensated congestive heart failure (Fig. 1). The ECG (see Fig. 2) revealed "frequent premature ventricular contractions, intraventricular conduction delay, right and left atrial enlargement, possible old inferior and extensive anterior myocardial infarction."

On the initial hospital admission, the patient was found to have digoxin toxicity for which he was treated with intravenous phenytoin sodium and discontinuance of the digoxin. The patient was seen by the Cardiology Section in consultation and underwent right and left heart catherization and selective cine coronary arteriography. The right ventricular systolic and pulmonary artery systolic, diastolic and mean pressures were slightly elevated. The pulmonary wedge pressure was elevated with a mean value of 23 mm Hg. The left ventricular end diastolic pressure was markedly elevated at rest and increased significantly following the left ventriculogram. There were no gradients across the aortic, pulmonic, mitral or tricuspid valves. The left ventriculogram demonstrated a moderately enlarged left ventricular cavity. Left ventricular contractility was markedly

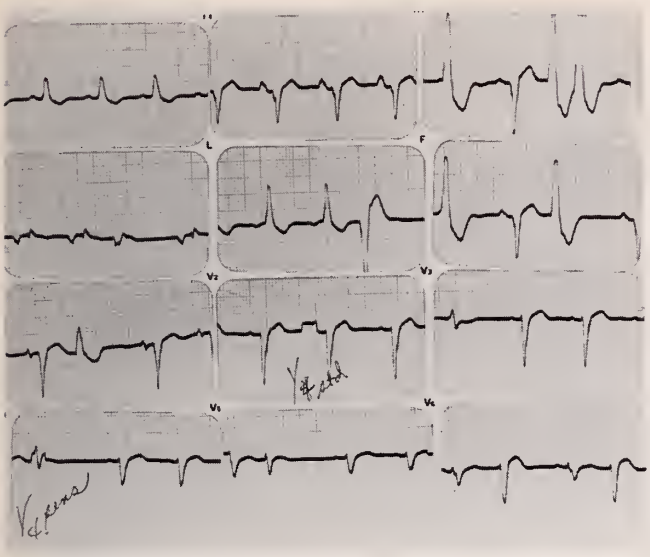


Fig. 2: Admission electrocardiogram.

TABLE I
INDUCTION I
Construction of pathophysiological hypothesis
INDUCTION II
Assay of probability from known associations

TABLE II
FINDINGS TO BE EXPLAINED

Cardiomyopathy, cardiomegaly, CHF	Retinitis/ ophthalmoplegia
Syncope	Hearing deficit
Chest Pain	Miscellany
Weight Loss	HX: ARF, hematuria meningitis
Polycythemia	
Proteinuria	Lab: serum enzymes, uric acid, creatinine

and diffusely diminished with an estimated ejection fraction of less than 10%. In the apical section of the left ventricular cavity, there was a filling defect which seemed somewhat mobile, probably representing a mural thrombus. Selective cine coronary arteriography demonstrated a "co-dominant" coronary artery system. The right coronary was extremely small and the left coronary had in effect a double orifice. Otherwise no abnormalities were found. The catherization was interpreted as consistent with a primary myocardial disease, etiology undetermined, with severe left ventricular dysfunction and probable mural thrombus in the left ventricular cavity.

A hematology consult was obtained for evaluation of his polycythemia. Repeat Hgb was 19.3 gm/100 ml, Hct 59 vol %, RBC 6.6 million/mm^3, MCV 89, MCHC 32.5, WBC 9200/mm^3. Platelets were 369,000/mm^3 and the reticulocyte count was 0.2%. His leukocyte alkaline phosphatase score was 111 with normal being 13 to 130. The blood volume was 4.6 liters (expected 3.8 liters), and his red cell mass was 2.7 liters (expected 2.2 liters). Pulmonary function studies were interpreted as showing a moderate restrictive ventilatory defect. His peripheral blood smear, bone marrow smear, hemoglobin electrophoresis, liver-spleen scan, intravenous pyelogram, electroencephalogram and brain scan all were found to be normal. The findings were consistent with a secondary erythrocytosis, however polycythemia rubra vera could not be ruled out. The patient was phlebotomized three times reducing his hematocrit to 40 vol. %.

Other investigative procedures suggested probable diabetes mellitus based on an oral glucose tolerance test; probable parenchymal kidney disease as evidenced by abnormal urinary sediment with multiple granular casts, proteinuria of 1.50 gm. per 24 hours, and a creatinine clearance of 53 ml/min. An upper GI and barium enema were within normal limits, and an oral cholecystogram showed cholelithiasis.

During the initial hospitalization, the patient progressively improved and tolerated regular physical activity well. The patient was discharged home on digoxin 0.125 mg and warfarin sodium 5 mg. daily, isosorbide dinitrate 5 mg. four times daily, and antacids three times daily. Between December 1974 and July 1976, the patient had three hospital admissions for decompensated congestive heart failure and one for acute gouty arthritis. On each admission the patient's condition improved with routine therapy and reinstitution of his normal medications. Repeat laboratory testing showed blood volume and red cell mass to be increased, his antinucleoprotein antibody was negative on three determinations, his rheumatoid factor was negative, and his C3 complement level was normal. A repeat 24 hour urinary protein excretion was 4.8 gram per day. In March 1976 the patient was seen by the Ophthamology and Neurology Sections in consultation who concurred in finding "progressive external ophthalmoplegia,"

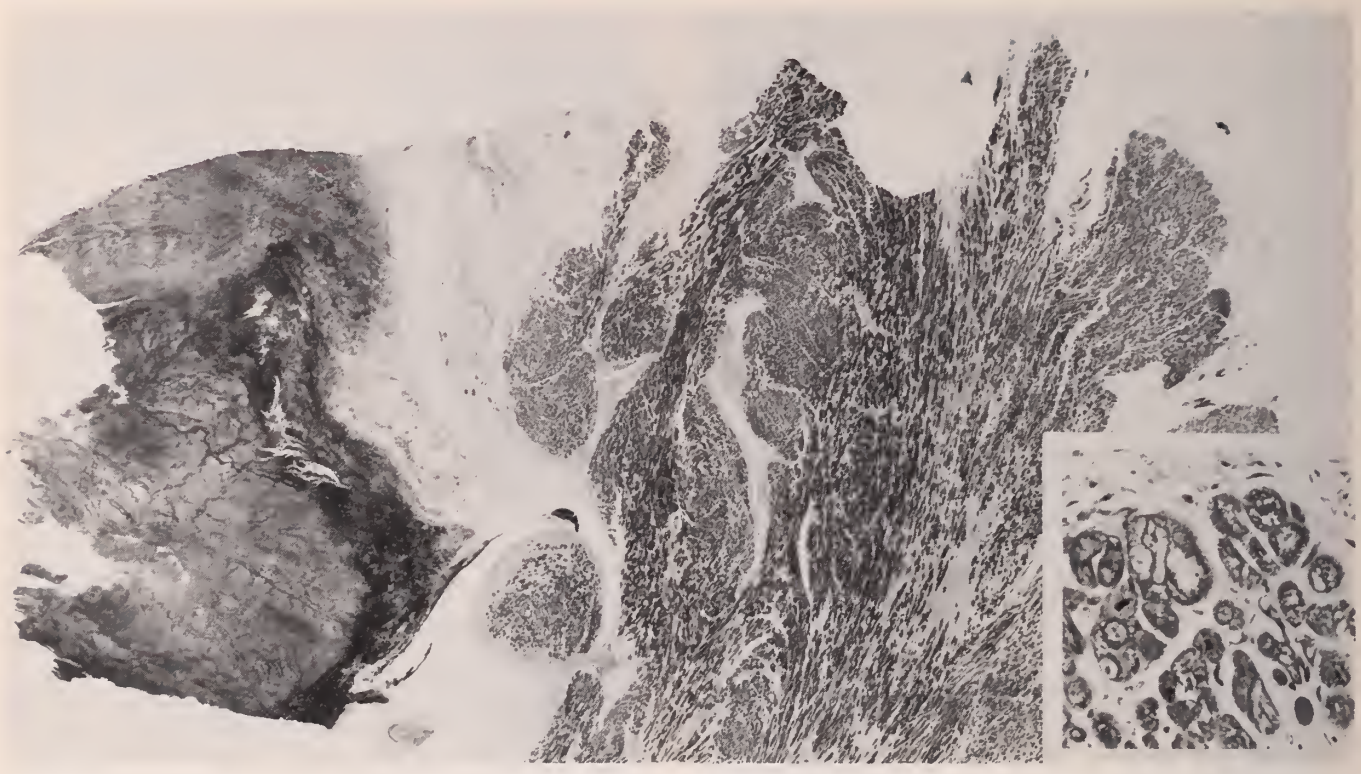


Fig. 3: Section through the hypertrophic free wall of the left ventricle showing epicardial, interstitial and endocardial fibrosis with mural thrombosis. Masson's trichrome, 8X.
3a: (inset): Edema and intracytoplasmic vacuolation of conducting fibers. H & E, 450X.

ptosis of right eyelid, and pigment granules in the fundus suggestive of "retinitis pigmentosa."

In July 1976, the patient presented with a four day history of markedly increased shortness of breath, peripheral edema, paroxysmal nocturnal dyspnea, and dyspnea on exertion. There had been no fever or associated chest pain. Physical examination and laboratory studies were consistent with profound cardiac failure. The patient's course progressively deteriorated; he developed marked hypotension and died after respiratory arrest. An autopsy was obtained.

CLINICOPATHOLOGICAL CONFERENCE

Discussion of Clinical Implications

Doctor Leo G. Horan: In the classical CPC—stylized or ritualized in its form, it is essential that at least one person present not know the final diagnosis and that he function as straight man in the dialogue. I have that role and I will lay bare before you my reasoning.

There is little doubt as to the global functional diagnosis for this patient; he presented in his fourth decade with the syndrome of the big heart, followed the relentless course of that syndrome and died within two years and two months after initial medical contact. But, why did he have the big heart? And, is there some meaning or pattern to the excess of clues? And, most importantly was there a treatable illness hidden in this complex case that should be recognized?

Physicians are happiest, most effective and most efficient when they can operate on Induction I as seen in Table I. Under such circumstances they have an anatomic-physiologic explanation for all findings. For example, the big heart has a reduced ejection fraction which leads to diminished cardiac output and in turn to weakness and fainting. Next, the venous jacket tightens and the juxtaglomerular apparatus shifts gears so that fluid and salt are retained - and, because of the venous tightening, the increased blood volume is disproportionately transferred to the lung bed. As a result the patient has dyspnea and dependent edema with such other organ sequela as anorexia. We can thus explain

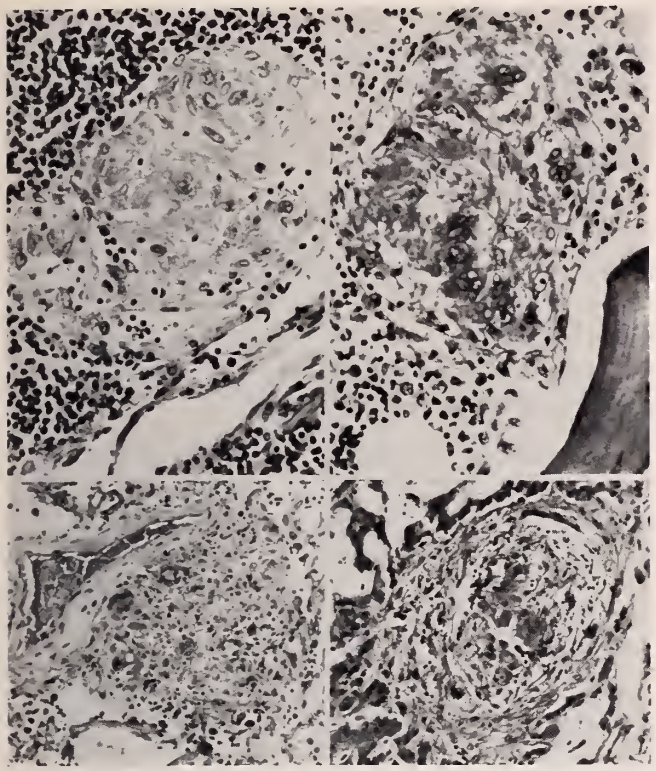


Fig. 4: Non-necrotizing granulomas involving (a) paracortical area of lymph node, 1400X; (b) bone marrow of vertebral column, 1400X; (c) perivascular tissues of lung, 700X; and (d) hepatic portal tract, 700X. H & E

TABLE III

I. Idiopathic
 A. Non-obstructive
 B. Obstructive
II. Secondary
 A. Neuromuscular disease
 B. Connective tissue disease
 C. Neoplastic heart disease
 D. Metabolic disease
 E. Nutritional disease
 F. Myocarditis
 G. Granulomatous disease (sarcoid)
 H. Amyloidosis
 I. Post-traumatic cardiomyopathy
 J. Toxic cardiomyopathy

TABLE IV
"ZEBRA TABLE"

	Sarcoid	Neoplasm	Neuromuscular Disease	Alport's
Cardiomyopathy	+	+	+	0
Filling defect	+	+(1°)	0	0
Syncope	+	+++	(+)	0
Chest Pain	+	+	+	0
Polycythemia		+	0	0
Retinitis	+	0	+	(+)
Hearing Deficit	0	0	+	+
Proteinuria	(+)	(+)	(+)	+

()—Indicate possible association with this disease.

the central syndrome for this patient but two questions are left unanswered:

1. Was the heart big because the muscle was tired, *ie,* overloaded from high blood pressure or bad valves, or because the muscle was directly sick from some other cause? The obvious causes of overload—except perhaps polycythemia—were absent and the muscle-improving, decongesting regimen of digoxin and diuretics did nothing.

2. What about all the other findings not explained on the "big heart in failure" basis? Thus we shift to Induction II. Having failed to explain everything as a straight forward mechanical derangement, we move from a chain of cause and effect to the business of known associations and we round up the suspects. These are the diseases with bad reputations whose *modus operandi* is the big heart syndrome.

Because of the need to be reasonable, I am going to assume Occam's rule as applied to medicine: look for one cause in patients under 50 years of age. Now before examining the police line-up (in Table III) we should consider what the suspect must be capable of doing (Table II). The dominant theme is that of cardiomegaly/cardiomyopathy/congestive heart failure and sudden death. We must therefore choose one of only three patterns of explanation:

1. Primary cardiomyopathy with all the other findings as a result;
2. Secondary cardiomyopathy with all the additional findings also from a primary cause; and
3. Multiple simultaneous illnesses.

For reasons of simplicity, I am arbitrarily rejecting alternative three from this point forward. Table III is an abbreviated form of Fowler's classification of cardiomyopathy. (1) Most of the items can be excluded for lack of clear evidence of the underlying disease which produces a cardiomyopathy

secondarily. Myocarditis is probably appropriately eliminated because more than the findings of the cardiomyopathy syndrome alone were present in this patient. Amyloidosis is worth at least transient consideration because of the proteinuria without hypertension, left bundle branch block, digitalis sensitivity and the neurological associations - all of which are distinctive findings in this rare group of diseases. The neuromuscular syndromes such as Friedreich's ataxia and 2) the allied metabolic syndromes such as Refsum's disease should be mentioned because of the coincidence of findings. In effect, the search narrows quickly upon brief reflection of the secondary cardiomyopathies. To speed the reasoning process of the differential diagnosis, we may examine a so-called Zebra Table as seen in Table IV. Examination of the correlations by rows and columns between findings and "likely" diagnosis provokes the following comments. The most comprehensive diagnosis is that of neoplasm primary to the heart. In such case, however, the findings are parodoxical: a filling defect was seen on catherization on the **left** side but polycythemia when found is usually seen in association with **right** atrial myxoma.[3,4] The eye and kidney sequellae can be attributed to metastases. Although the association of polycythemia with renal neoplasm exists, filling defects are almost always in association with primary not secondary cardiac neoplasms.[4] The presence of muscle weakness and muscle failure which may be imitative of syncope and the presence of the cardiomyopathic syndrome suggest strongly the possibility of a neuromuscular disease such as Friedreich's ataxia. However, the most hopeful diagnosis is sarcoidosis either with a large heart and congestive failure resulting from systemic and pulmonary sarcoidosis or from actual infiltration of the heart itself with a granulomatous process.[5] This is the diagnosis which would have made the most difference had it been made in life. If strongly suspected, I believe it would be appropriate to have recommended catheter-biopsy of the heart,[6] as well as appropriate biopsies of the reticuloendothelial system (liver, bone marrow and lymph nodes).

Discussion of Pathology

Doctor W. L. Broghamer, Jr.: The pericardial cavity was partially obliterated by fibrous adhesions. The epicardium over the anterior wall of the left ventricle was focally opacified. The heart weighed 450 grams. There was biventricular hypertrophy and dilatation with the latter indicated by flattened trabeculae. The left ventricle was 1.2 cm in thickness; the right 0.5 cm. The ring circumferences of the pulmonic and aortic valves were within normal limits. The atrioventricular rings, however, were minimally dilated with the tricuspid ring 13.5 cm in circumference and the mitral, 12.0 cm. Valvular abnormalities were not apparent. The coronary ostia were patent and the arteries were grossly normal.

Endocardial fibrosis extended from the apex over approximately 40% of the left ventricular wall. The thickest area was 4 mm and lay beneath a friable mural thrombus with organization at its base (Figure 3). It occupied one-third of the chamber's volume. The presence of the intracardiac mural thrombus in the dilated left chamber could represent an anatomic manifestation of relative stasis of blood within the heart, although the possibility of it expressing an extremely depressed cardiac output cannot be excluded.

Microscopically, the myocardial fibers were hypertrophic and occasionally revealed nonspecific cytologic degenerative changes. These consisted of cytoplasmic vacuolization, fragmented myofibrils and nuclear pyknosis. There were multiple foci of interstitial fibrosis in various stages of maturation. The largest area was 3 cm. This healed infarct was not adjacent to the mural thrombus but occurred in the anterior wall of the left ventricle. The intramural vessels were not remarkable. Interstitial inflammation was not present.

In the absences of clinical hypertension, anatomical abnormalities, diffuse myocardial inflammatory processes and coronary artery disease, a primary cardiomyopathy should be considered. While the clinical diagnosis of this form of cardiopathy is made essentially by exclusion, support for the clinician's impression is usually obtained at necropsy. By using recognized morphologic criteria the cardiomyopathies can be classified.[1] For lack of specific morphology, the infiltrative and endomocardial types can be excluded in this instance, there-by leaving for consideration the more common idiopathic forms. These in turn can be subdivided. The presence of ventricular dilation,

a thickened left ventricle of less than 1.5 cm, antrioventricular valvular dilatation, and focal myocardial/endocardial fibrosis identifies the idiopathic cardiomyopathy in this case as dilated ventricular type (congestive type). The normal orientation of the myocardial fibers one to another in the ventricular septum further distinguishes the dilated from the non-dilated (hypertrophic) type of idiopathic cardiomegaly. The presence of mural thrombi, particularly in the apex of the left ventricle, is not uncommonly associated with the dilated ventricular type of cardiomyopathy.

The idiopathic congestive cardiomyopathies are frequently associated with conduction abnormalities. Microscopic examination of the conducting system often reveals similar degenerative processes to those observed in the myocardium.[2,3] In this case similar changes were noted in the fibers of the bundle branches and the non-conducting myocardium, but to a greater degree in the former (Figure 3, inset). The sarcoplasm of the conducting fibers were retracted from their membranes. There was intracytoplasmic vacuolization often to the extent to cause a peripheral displacement of the myofibrils. The adjacent interstitium was edematous, finely vacuolated and minimally infiltrated by lymphocytes.

Morphologic support for left-sided congestive heart failure was provided by the histologic features of pulmonary chronic passive congestion. Superimposed was severe acute bronchopneumonia which primarily accounted for the 1,050 and 950 gram right and left lungs, respectively.

There was a second, unrelated, systemic disease. It was basically a granulomatous inflammatory process involving the reticuloendothelial system (Figure 4). Scattered throughout the parenchyma of randomly removed hilar, peribronchial, paraaortic and portal lymph nodes were non-necrotizing granulomata. They were in various developmental stages, ranging from nodular aggregates of activated macrophages to organized collections of epithelioid cells often containing giant cells. Nonspecific asteroid bodies were occasionally identified in both the Langhans and foreign body type giant cells. The only other significant cellular constituent of the granulomas were lymphocytes. The nodules were commonly identified in the hepatic portal areas, the spleen, pulmonary tissues and the bone marrow. Kinyoun's and fluorochrome (TB Auramine M) stains for acid fast organisms were negative, as were Gomori methanamine silver (GMS) and periodic acid Schiff (PAS) stains for fungi. Brown-Brenn stains for bacteria were negative. Doubly refractile material was not identified. This tuberculoid response without necrosis and with multi-organ involvement is highly suggestive of sarcoidosis. The unequivocal diagnosis of sarcoidosis, however, is dependent additionally upon negative cultures for microorganisms obtained from lesional tissue,[4] which was not available in this case.

Two problems remaining to be addressed are the clinically recognized renal dysfunction and the possible polycythemia vera. The microscopic examination of the kidney revealed histologic alterations confined to less than 25% of the glomeruli. Only portions of the Malpighian tuft were involved. The structural abnormality consisted of an increase in PAS positive mesangial matrix. Neither endocapillary proliferation, nor prominent extramembraneous deposits or spikes (Jones' kidney stain) were demonstrated. There were no significant tubular or interstitial abnormalities. It is probable that this uncharacterized glomerulopathy is related to the septemic granulomatous process and explains the patient's significant proteinuria, the presence of multiple urinary granular casts, abnormal creatinine clearance, and elevation of the alpha-2-globulin fraction on serum protein electrophoresis.

The hematopoietic tissue obtained from the vertebral column was in the hyper-proliferative state with greater than 75% cellularity. This was primarily due to erythroid hyperplasia. The megakaryocytes fell within the normal range of 30-130/100 HPF. Megakaryocytomegaly was not appreciated. Individual reticulin fibers without coarsening and focal fine reticulin networks were noted (Wilder's reticulin stain). Collagen (Masson's Trichrome Connective Tissue stain) was not seen within hematopoietic tissues. Although the marrow sections were formalin-fixed and decalcified, normal amounts of iron were identified (Prussian Blue reaction). There was neither hepatomegaly nor splenomegaly. Extramedullary hematopoiesis was not present. Therefore, morphologic support for the clinical impression of

polycythemia vera was not present[5]. The erythroid hyperplasia and peripheral erythrocytosis undoubtedly represents a secondary phenomenon.

Cause Of Death: Probable cardiac arrhythmia as supported by

1. Cellular edema and vacuolar degeneration of the Purkinje fibers.
2. Marked interstitial edema and vacuolization in area of the conducting fibers.

Final Anatomic Diagnosis:

1. Idiopathic cardiomyopathy, dilated ventricular type, with:
 a. Biventricular hypertrophy/dilitation
 b. Endocardial fibrosis and mural thrombosis, apex, left ventricle
 c. Myocardial infarct, remote, anterior wall of left ventricle
 d. interstitial fibrosis
 e. Myocardial fiber hypertrophy and vacuolar degeneration
 f. Fibrous pericarditis
 g. Chronic passive congestion of the lungs
2. Acute brochopneumonia, bilateral.
3. Non-necrotizing granulomatous disease, tuberculoid type, highly suggestive of sarcoidosis.
4. Focal segmental glomerulopathy, probably secondary to systemic granulomatosis.

Doctor Horan:

I am troubled to conclude that the patient had both an idiopathic cardiomyopathy and an asymptomatic non-cardiac sarcoidosis. I am reminded that in the study of cardiac sarcoidosis by Roberts et al[5] a small number of the patients demonstrated only fibrosis and scarring in the myocardium with the conclusive histologic diagnosis of sarcoidosis having to come from extracardiac tissues. In such instances, the transmural myocardial scarring in the absence of signficant coronary artery narrowing was presumed to be the result of healed sarcoid granulomas. If such had been the case here, corticosteriod treatment may have been beneficial - although if instituted before sufficient myocardial healing, it might have predisposed the patient to ventricular aneurysm formation.

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Platelet Aggregation in a Case of Branch Retinal Vein Occlusion

JOHN W. GARDEN, M.D.

Retinal Branch Vein Occlusion is considered to be the second leading cause, following diabetic retinopathy, of retinal vascular disease. Multiple etiologies have been proposed. A patient with branch vein occlusion and abnormal platelet aggregation is presented.

Case Report

A 56-YEAR-OLD caucasian male presented with the chief complaint of the loss of the inferior field of vision in the right eye upon awakening. He stated that the left eye was unaffected. A past medical history of allergies to horse serum, penicillin, and hay fever substances was elicited. He related a family history of paternal stroke. On examination, he was noted to have finger counting vision at one foot in the right eye and 20/20 vision in the left eye with a minor correction. Visual field examination on the right revealed a severe inferior altitudinal hemianopsia to hand motions. The left field was full to the 2/1000 white test object. The examination of the anterior segment was unremarkable externally and with the slit lamp. The temporal arteries were compressible and nontender. The intraocular pressure was 19 O.U. The blood pressure was 125/85 in both right and left arms. The funduscopic examination revealed an area of whitish retina with a very attenuated artery in the superior temporal retina extending over the macula down to the horizontal raphe. Multiple blot hemorrhages or microaneurisms were noted throughout the area of whitish retina. The right carotid artery revealed a muffled sound with a low continuous bruit. Ophthalmodynamometry was 90/50 right and 110/60 left. Examination of the left fundus was unremarkable. The diagnosis of a retinal branch artery occlusion on the right was made. An embolism from a right carotid stenosis was considered to be the likely cause, but arteriography was normal. Three weeks later his vision improved to finger counting at 10 feet but the altitudinal hemianopsia remained. Fundus examination at this time revealed scattered multiple flamed shaped hemorrhages and cotton wool spots with dilation and tortuosity of the vein. The diagnosis was changed to a retinal branch vein occlusion and medical evaluation secured. No evidence of diabetes could be detected. The erythrocyte sedimentation rate, antinuclear antibody screen, the C-3 compliment level, serum creatinine, liver function tests, blood count, and platelet count were all normal. Over the next four months the vision improved to 20/100 in the right eye despite the fact that the hemorrhages and microaneurysms appeared the same. Seven months after the original episode he returned stating that there was a further decrease of the vision in the right eye. It was finger counting at two feet. The dense inferior altitudinal hemianopsia still remained and the right pupil showed a Marcus-Gunn response. He was noted to have macular cysts on the right and elevation of the right disk with diffuse blot and flamed shaped hemorrhages throughout the posterior pole. A quantitative circulating platelet aggregate ratio was performed. The result was a 0.77 response with a control of 0.93 ± 0.11 which is consistent with the formation of platelet aggregates *in vivo*. Fibrinogen level, prothrombin time, P.T.T., and antithrombin III were within the normal range. A repeat platelet aggregate ratio was 0.64. Fundus photographs were taken and a fluorescein angiogram confirmed the macular edema and areas of capillary nonperfusion. After achieving serum salicylate levels in the therapeutic range, the platelet aggregate ratio rose to 0.93. He is currently being following with maintenance aspirin and observed for early neovascularization.

Department of Ophthalmology, University of Kentucky Medical Center, Lexington, Ky. Reprint Request to John W. Garden, M.D., Department of Ophthalmology, University of Kentucky Medical Center, 800 Rose St., Lexington, Ky. 40536.

Discussion

The entire subject of retinal branch vein occlusion has recently been reviewed by Orth and Patz.[1] This patient did not fit into any of the categories in their differential diagnosis. In recent years, considerable attention has been paid to the role of the platelet in vascular disease. Readily available tests for platelet aggregation exist.[2] The positive platelet aggregation test in this patient suggests another possible etiology of vascular disease in the ocular and orbital circulation.

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Carcinoid Tumor of the Breast

LOUIS D. DUBILIER, M.D. AND JOHN M. STOECKINGER, M.D.

A woman with a rare, large carcinoid tumor of the breast is presented. Cytoplasmic argyrophilia is required for the diagnosis. Prognosis is related to the size of the neoplasm.

CARCINOID tumors of the breast represent one of the rarest neoplasms of the breast. In 1977 Cubilla and Woodruff[1] identified and studied 10 patients with this tumor. Subsequently, Kaneko, et al[2] reported bilateral carcinoid tumors in a man associated with norepinephrine secretion. This is a case report of another patient with a large carcinoid of the breast and is being presented to call this entity to the attention of the general medical community.

Case Report

An 86-year-old widowed, senile, white woman was admitted to Central Baptist Hospital on April 8, 1981, with a softball-sized, enlarging, bleeding, fungating mass in the left breast present for over three years. There was no clinical evidence of metastasis. The breast lesion showed pressure necrosis and breakdown with bleeding due to a large mass which was swollen and hard, but not tender. The clinical impression was cystosarcoma phylloides. Complete blood count, urinalysis and chem-24 revealed only a slightly elevated serum creatinine to 1.7 mgs/dl and an elevated triglyceride to 275 mgs/dl. A simple mastectomy was performed on April 10, 1981, without complications.

Gross Pathologic Findings

The specimen consisted of an ellipse of breast skin which was stretched over a tumor mass just adjacent to the nipple. The skin showed an increased vascular pattern with areas of central ulceration. The cut surface of the 10 cm. in diameter mass demonstrated a discrete, soft, tan-gray, somewhat lobulated neoplasm with extensive areas of hemorrhagic softening, areas of sticky gelatinous tissue and focal yellow necrosis. The deepest tissue was free of tumor and moved freely over the tumor mass. A sample was immediately frozen and sent for estrogen receptor assay and progesterone receptor assay.

Microscopic Description

Multiple sections of the tumor mass demonstrated an essentially similar pattern throughout. The neoplasm had a distinct organoid appearance similar to that seen in a carcinoid type tumor. (Fig. 1) The nuclei showed a peppery chromatin appearance, small nucleoli, and the cytoplasm generally was finely granular but not well defined. In some places it had an adenoid appearance. There was quite prominent vascularity as well as edema and hemorrhage. The borders of the tumor were quite discrete and it extended up to the dermis of the skin. Special stains for argentaffin granules (Fontana Masson Stain) revealed none. However, special stains for argyrophil granules (modified Grimelius stain) demonstrated quite easily cytoplasmic granularity and positivity. (Fig. 2)

The results of the estrogen receptor assay and progesterone receptor assay were both positive at 125 fmole/mg cytosol protein and 196 fmole/mg cytosol protein, respectively.

Discussion

Carcinoids are known to occur not only in the gastrointestinal tract and endodermally derived organs such as lung, pancreas, bile ducts, gallbladder, etc., but also have been described in thymus, skin, nasal mucosa, ovary, testis and uterine cervix.[1] These sites are consistent with the general distribution of argyrophilic cells thought to be derived from the neural crest.[3]

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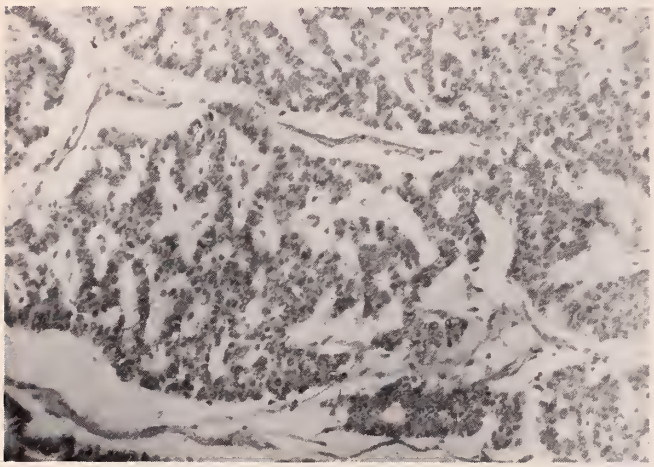


Fig. 1: Characteristic organoid pattern of a carcinoid tumor. x100

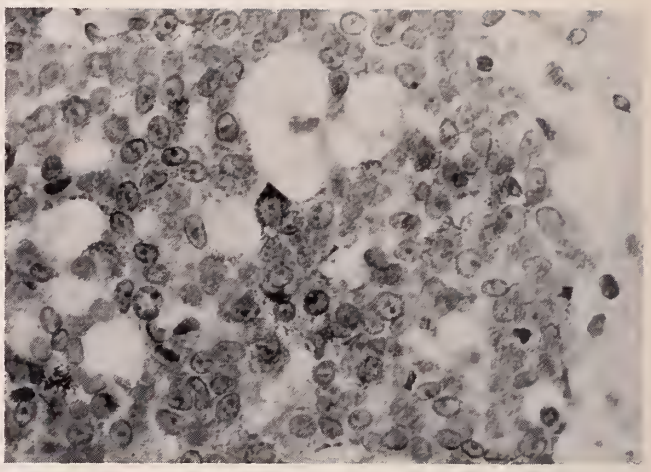


Fig. 2: Characteristic argyrophilia in the cytoplasm of the tumor cell near the center with finer granules in other cells. x450

The case under discussion satisfies the reported criteria for carcinoid tumors[1] in that it histologically had the organoid pattern of carcinoid tumors in the usual sites and demonstrated easily identifiable argyrophilia with the modified Grimelius stain. It did not stain positively for argentaffin granules with the Fontana Masson stain and the patient did not show any evidence clinically of the carcinoid syndrome.

These tumors are usually well circumscribed, solid, tan tumors in situ and microscopically demonstrate solid nests and cords of small cells embedded in a vascularized stroma with a distinctly organoid appearance. In some places, a "ribbony" pattern or glandular pattern is evident similar to the variety seen in carcinoids elsewhere. There may be an intraductal component and an infiltrating component simulating lobular carcinoma. The cytoplasm varies from amphophillic to slightly eosinophilic and is poorly defined. The stroma is usually dense. By definition, all of these tumors must demonstrate cytoplasmic argyrophlia and usually this is abundant and easily identified. Occasional foci of intra and extracellular mucin are detected. The cell of origin in the breast remains an engima. No argyrophil granules were identified in control material from normal breast, benign breast lesions, or mammary carcinomas.[1] Ultrastructurally, the neoplastic cells contain dense-core neurosecretory granules in the cytoplasm which are membrane bound, uniformly round, and range between 100 and 350 nm in diameter. The dense cores are separated by a narrow clear halo from the encasing membrane. This ultrastructural pattern is characteristic of tumors of endocrine cells and carcinoid tumors.

In none of the acceptable cases with breast carcinoids was there evidence of carcinoid syndrome. However, Kaneko, *et al*[2] documented a case of bilateral carcinoid tumors in a man associated with elevated norepinephrine in the urine which they thought was derived from the breast tumor. In addition, Cohle *et al*[4] reported a well documented case of an ACTH-secreting lobular carcinoma of the breast in which membrane-bound dense core granules surrounded by a clear halo were present in the primary and metastatic neoplasm and which demonstrated cytoplasmic granules reacting immunochemically to ACTH antisera within the tumor. Cohle, *et al*[4] also summarized the other reported cancers of the breast which have produced calcitonin, parathyroid hormone, and human chorionic gonadotropin. These cases provide evidence that these breast tumors can be hormonely active and suggest the presence of neuroendocrine cells in the breast as a source of such neoplasms as in the lung. Further studies should identify the cell of origin of the neoplasms in the breast.

Prognostically and behaviorally these patients can be divided, even with the small number of cases available, into two groups based on the size of the tumor. Tumors 3 cms or greater in diameter were associated with nodal and distant metastases within one to 16 years after the original diagnosis. Patients with tumors between 1 and 2 cms in di-

ameter had no nodal metastases and were alive during the follow-up period of up to three and a half years. The distribution of metastases was wide spread including bone, liver, lungs and brain. The interval between mastectomy and metastasis ranged from five months to 10 years. One patient developed a contralateral mammary carcinoid three years after the first one was diagnosed. At this time it appears that the treatment of choice is a modified mastectomy.[1]

Our patient had a positive estrogen receptor assay and progesterone receptor assay determination on the lesion. This is the first reported data about these assays on this neoplasm.

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Disorders of Esophageal Motility

RICHARD A. WRIGHT, M.D.

In recent years esophageal motor disorders have been identified more frequently and expeditiously. Definable disease entities have replaced clinical syndromes attributable to psychosomatic disorders. The advent of esophageal manometry over the past two decades has made science out of former conjecture.

Anatomy

THE esophagus functions as a muscular conduit in the transfer of liquids and solids from the hypopharynx. It is lined by squamous mucosa and has no role in digestion or absorption of ingested substances. Its length in the average adult is 25 to 35 centimeters. In the resting state it is a collapsed, ribbon-like structure that can be distended to two to three centimeters with a swallowed bolus of food. The entrance to the esophagus is a slit-like structure located posterior to the vocal cords and epiglottis forming the lowest point of the hypopharynx. The pharyngeal constrictor muscles and pyriform sinuses make up a funnel configuration.

The cricopharyngeus muscle, or upper esophageal sphincter, consists of striated muscle fibers oriented transversely, inserting on the cricoid cartilè. The tubular esophagus is endowed with circular and longitudinal muscle layers. The upper eight to 10 centimeters is predominantly striated muscle with a grandual transition to smooth muscle thereafter. Between the two layers of muscle are intramuscular nerve plexuses (Auerbach's plexuses) which permit the integration of muscular activity into a peristaltic wave, and provide for relative autonomy from higher nerve centers in secondary peristalsis. Unlike the remainder of the gastrointestinal tract the esophagus has no serosa.

From the cricopharyngeus muscle to the insertion of the phrenoesophageal ligament near the gastroesophageal junction the esophagus is relatively mobile, coursing through the posterior mediastinum behind the trachea and heart. It enters the abdomen through a diaphragmatic hiatus which is formed with areolar tissue. The phrenoesophageal ligament which is formed by the aponeurosis of the transversalis fascia has been thought to anchor the lower esophagus intra-abdominally. In the recent past reflux of gastric content into the esophagus was considered to be secondary to a flaccid phrenoesophageal ligament which allowed the lower esophagus and stomach to drift upward into the thoracic cavity, permitting regurgitation of gastric acid and enzymes into the esophagus. Until the demonstration of the lower esophageal sphincter by manometry in 1956, this simple mechanical explanation was considered to be the primary barrier to reflux.

Embryology

In order to understand potential motor disorders of the esophagus embryology must be considered. As a bud of the foregut the esophagus assumes a tubular configuration in the first three weeks following fertilization.[1] Subsequently, the laryngotracheal fissure separates this tubular structure into the early trachea and esophagus. This process is complete at seven weeks post-fertilization. Circular muscle fibers encase the esophagus initially followed by an outer layer of longitudinal muscle several weeks later.[2] The proximal one third of the esophagus consists primarily of striated muscle, while the distal third is almost entirely comprised of smooth muscle. The middle third of the esophagus is a mixture of smooth and striated muscle. Innervation of the pharynx occurs in conjunction with the original branchial arch origin. The upper esophagus and cricopharyngeus muscle receive their nerve supply from the inferior and superior laryngeal nerves. The distal esophagus is innervated through mi-

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gration of second order postganglionic parasympathetic and sympathetic neurons, whose preganglionic nuclei are located in the vagal nucleus in the medulla and midbrain. Postganglionic parasympathetic neurons synapse with myenteric plexuses in the wall of the esophagus.[3]

Physiology

At maturity the function of the esophagus is dependent on neural input, myogenic coordination, and hormonal stimuli.[4] Following deglutition an organized sequence of peristalsis is initiated, starting with relaxation of the upper esophageal sphincter, primary and secondary contractions of the esophageal body, and relaxation of the lower esophageal sphincter.[4] The reticular formation in the medulla initiates vagally mediated neural response.[5] A single vagal trunk is all that is necessary for the normal sequence of events, indicating intrinsic myoneural activity within the esophagus after initial CNS stimulation.[5] Intrinsic neural responses are via muscarinic and nicotinic parasympathetic receptors and dopaminergic sympathetic receptors.[6] Primary peristalsis is initiated by central neural stimuli while secondary peristalsis is initiated by stretch receptors in the esophageal wall.[5] Apparently, secondary peristalsis is independent of central nervous system input.[5] In secondary peristalsis the wall tension is developed within the esophagus and is related to the size of the food bolus swallowed and the inotropism of the muscle itself.[7] Inotropism appears to be related to neurohumoral homeostasis with well-documented changes in the force and velocity induced by gastrin and other circulating gastrointestinal hormones.[7]

The lower esophageal sphincter (LES) is an area not grossly or microscopically identifiable as a muscular ring which occupies the distal three-four centimeters of the esophagus. Its function is to separate the esophagus lumen which has intermittently negative pressure on inspiration from the gastric lumen which has positive or neutral pressure during both inspiration and expiration.

The lower esophageal sphincter (LES) has unique qualities both in myogenic characteristics and in response to neurohumoral agents. Its tone is maintained at short myofibril lengths with a specialized transport system.[8] Furthermore, the spontaneous active tension in the lower esophageal sphincter is far greater than that of the musculature of the rest of the esophagus.[8] Gastrin was initially thought to be the primary determinant of basal LES tone because of its impact postprandially of doubling the lower esophageal sphincter pressure.[9] However, gastrin levels and LES pressures do not correlate well, suggesting that other factors are probably more important.[10] Administration of intravenous gastrin, alpha adrenergic agents, acetylcholine, serotonin, prostaglandin F_2a, motilin, substance P, histamine, and pancreatic polypeptide increase LES pressure.[4] Beta adrenergic agents, secretin, cholecystokinin, gastric inhibitory polypeptide, vaso-active intestinal peptide, dopamine, prostaglandin E1 and 2, cyclic necleotides, and glucagon decrease LES pressure.[4]

Clinical Presentation of Esophageal Motor Disorders

The patient with an esophageal motor disorder may present with a number of different symptoms. Dysphagia, or difficulty swallowing, is perhaps the most common complaint. The patient may note that solids or liquids lodge in a particular location causing an uncomfortable, though not usually painful sensation. Dysphagia of motor origin is intermittent and is produced by both solids and liquids. Very cold liquids are most apt to produce symptoms, while hot liquids seem to pass more readily. Relief with repeated swallowing, valsalva maneuver, or throwing the head and shoulders back is characteristic of a motor disorder. If the patient is forced to regurgitate a bolus in order to gain relief a mechanical obstruction such as a stricture or malignancy is more likely. Most patients with motor disorders of the esophagus find that dysphagia is intensified by emotional upset.

Pyrosis or heartburn is a common symptom or reflux esophagitis. Those subjects who have lower esophageal sphincter dysfunction will frequently complain of epigastric and substernal burning and will subsequently be noted to have esophagitis by endoscopy.

Odynophagia, or painful swallowing, usually denotes an inflammatory process in the esophageal mucosa such as might occur with severe esophagitis, peptic ulceration, or infection with Candida or Herpes simplex virus. It may also occur with

diffuse esophageal spasm and other motor disorders of the esophagus.

Esophageal colic is a substernal crampy or pressure sensation that commonly radiates straight through to the back. It appears to be unrelated to posture or exercise and may awaken the patient from sound sleep. Esophageal colic can be triggered by cold liquids, rarely by solids. It cannot be prevented or relieved by antacids, but is often alleviated by sublingual nitroglycerine. Patients with esophageal colic who were previously labeled as having atypical angina are often found to have esophageal motility disturbances.

The classification of dysphagia is quite variable according to the individual clinician. *Transfer dysphagia* denotes an inability to pass a food bolus into the esophagus. This disorder is technically pre-esophageal and may result from incoordination of the pharyngeal contraction and/or the failure of the cricopharyngeus muscle to relax and admit the bolus to the esophagus. Thus, transfer dysphagia refers to a primary or secondary defect in pharyngeal coordination in the presence of absence of a normally functioning upper esophageal sphincter. *Transport dysphagia* includes disorders of peristalsis in the body of the esophagus resulting in a functional obstruction to the passage of food from the upper esophagus to the lower esophagus. This type of dysphagia includes both disorders of the smooth muscle contractility as well as disorders involving propagation of a peristaltic wave through the body of the esophagus. *Entry dysphagia* refers to an obstruction, either mechanical or functional, to the transit of food from the lower esophagus to the stomach. In motor disorders of the esophagus lower esophageal sphincter dysfunction is the most likely etiology of this type of dysphagia.

Diagnostic Work-up of Patients With Esophageal Motor Disorders

A number of methods have been classically used to evaluate patients with symptoms referrable to the esophagus. Traditionally, barium x-rays have been the most readily available means to assess the patency and function of the esophagus. X-rays can define the anatomy and size of the esophagus and give a rough, subjective indication of transit time and the presence or absence of peristalsis. Gravity alone may empty the esophagus of ingested contrast material, therefore, examination in the supine position is essential. Cine-esophagrams are effective in the evaluation of pharyngeal coordination on deglutition and in peristalsis and sphincter relaxation. In addition to the standard barium swallow, a marshmallow or piece of bread may be saturated with barium to assess solid emptying.

A pharyngeal examination may be of benefit in ruling out pathology in the pharynx. Esophageal wash cytologies are effective in the detection of early malignancy in certain centers. Perfusion of dilute hydrochloric acid into the esophagus (the Bernstein Test) may be of help in determining whether substernal pain is secondary to esophageal disease (notably, diffuse spasm or esophagitis). Direct rigid or fiberoptic endoscopy provide an excellent means of assessing mucosal disease, mass lesions, stricture and peristalsis. Finally, esophageal manometry is the most sensitive means of detecting motility disturbances and disorders of sphincter function.

Esophageal Manometry

With the development of the perfused esophageal manometry apparatus in the late 1950's and early 1960's, it became possible to accurately diagnose motor disorders of the esophagus. The early systems consisted of three separate catheters that were simultaneously perfused at a slow rate by a Harvard pump. Three different ports located five centimeters apart longitudinally were connected with a transducer system such that pressure could be measured. More recent developments have created a non-perfused system whereby the transducer is located within the catheter in the esophagus itself.

The procedure of esophageal manometry is simple, but must be done in a meticulous fashion. The triple transducer catheter is inserted via the nostrils or mouth and advanced until all three ports are in the stomach. This is easily ascertained by watching the recording device during respiration. When there is a positive deflection on inspiration the port is located within the abdomen, while a negative deflection indicates intrathoracic location. The patient is asked to avoid swallowing and breathe quietly. The catheter is slowly and

constantly withdrawn at a rate of 1 centimeter per second until the proximal port is seen to be in the lower esophageal sphincter as evidenced by high sustained pressure. The patient is then asked to swallow and assessment of lower esophageal relaxation is made. The lower sphincter is assessed at all three transducer sites. When the transducer ports are all above the lower esophageal sphincter, located in the body of the esophagus, the patient is asked to swallow again. At this point peristalsis can be assessed. Occasionally, a secondary contraction may occur following the initial peristaltic cascade. Prolonged continuous contractions, simultaneous non-peristaltic contractions, and spontaneous contractions are abnormal, and will be discussed in reference to clinical disorders of esophageal motility. The transducer apparatus is then withdrawn and the upper esophageal sphincter is entered sequentially by each of the three transducer ports. Coordination of relaxation of the cricopharyngeus muscle with the pharyngeal contractions is noted.

Clinical Disorders of Esophageal Motility

Achalasia

Achalasia or cardiospasm was first described by Thomas Willis in 1682. Autopsies of cases having the disease revealed massively dilated esophagi with a presumed defect thought to be primary failure of esophageal musculature. With the advent of contrast radiology the disease became recognizable pre-mortem. There is no animal model for achalasia. Chaga's disease, which is caused by Trypanosoma cruzi gives a disease entity identical to idiopathic achalasia. In contradistinction to achalasia, however, megaloureter, megaduodenum, and megacolon are seen in Chaga's disease. In both achalasia and Chaga's disease there is an absence or relative decrease in Auerbach's plexuses and an inhanced response of esophageal musculature to neurohumoral agents. The lower esophageal sphincter in achalasia is hypersensitive to both cholinergic agents and to gastrin in low doses.[11] Maximal lower esophageal contraction, however, is not increased over normal at high doses of gastrin.[4] Lower esophageal smooth muscle cells are normal by light microscopy but show detachment of myofibrils and cellular atrophy by electron microscopy.[12] Whether this represents a primary disease of the muscle or the effect of denervation is not clear. Some investigators have described abnormalities of the vagus nerve resembling Wallerian degeneration. Fragmentation of the cell nuclei in the dorsal motor nuclei of the vagus has been noted.[13] The absence of silver staining inhibitory ganglia in the esophageal wall has been described as well.[13] Some investigators have suggested possible damage via a neurotropic virus.[13]

Pharmacologic evidence suggesting the denervation of the esophagus as the primary defect in achalasia exists in the mecholyl test. The normal esophageal response to synthetic acetylcholine is minimal. Patients with achalasia show a marked, sustained increase in baseline pressure, however, on administration of synthetic acetylcholine. This heightened response is interpreted as denervation hypersensitivity (Cannon's law). The lower esophageal sphincter is also hypersensitive to exogenously administered gastrin in achalasia, but whether this is secondary to denervation or to direct muscle stimulation is not yet clear.[10]

The history given by patients who have achalasia is quite variable. The most common age of onset is between the third and fifth decade of life, with the predominant symptom being a gradual onset of dysphagia which is exacerbated by emotional upset. Patients have difficulty swallowing both liquids and solids, and may describe postural maneuvers that aid swallowing. Many patients claim that alcohol alleviates dysphagia, the mechanism probably due to direct smooth muscle relaxation at the sphincter. Subjects may complain of regurgitation of food ingested hours or days before, usually lacking in acid taste. Pyrosis is very uncommon in the disease probably because of the high pressure in the lower esophageal sphincter which prevents reflux. Frequent bouts of aspiration pneumonia may occur secondary to retained food and secretions in the esophagus.

The physical examination is generally unrevealing except for weight loss. The chest x-ray may show a mediastinal mass because of esophageal dilation, and scarring at the basis of the lung field secondary to nocturnal aspiration of retained food. A barium swallow will reveal a lack or peristalsis, esophageal dilation if the process has been

chronic, and a beak-line tapering of the distal esophagus representing the hypertensive lower esophageal sphincter.

Esophageal manometry is the most sensitive and specific means of diagnosing achalasia. The motility tracing will show a normal upper esophageal sphincter, absence of peristalsis, and a hypertensive lower esophageal sphincter which does not relax to baseline on deglutition. Contractile waves that occur in the body of the esophagus are simultaneous and non-peristaltic in contradistinction to the normal cascading sequence. The lower esophageal sphincter is hypertensive with a pressure usually in excess of 40 millimeters of mercury (normal is 15-30 millimeters of mercury). The sphincter pressure may decrease after a swallow, but does not reach baseline pressure, thus preventing the passage of a bolus of food or liquid into the stomach. Fiberoptic endoscopy should be performed if there is any suspicion of gastric carcinoma in the fundus since tumors may locally invade the gastroensophageal junction and produce an achalasia-like picture. Also, patients with long-standing, untreated achalasia have an increased incidence of squamous cell carcinoma of the esophagus (2-7%) for unknown reasons perhaps related to the stasis in the lower esophagus.[4]

The treatment of achalasia is somewhat controversial. Beta adrenergic blockers and anticholinergic agents cause a fall in lower esophageal pressure but are clinically ineffective in reducing dysphagia.[14] The original case report by Willis was treated with an attempt at dilation using a section of whale bone tipped with a piece of sponge. Currently, most gastroenterologists perform pneumatic dilation using a tube assembly with a balloon at the distal end. The balloon is inflated while in the lower esophageal sphincter region and causes a controlled muscle tear. The procedure is known as a brusque dilation and the apparatus is commonly referred to as a Mosher bag. This is attempted twice under fluoroscopic guidance on separate occasions if it is not successful initially. This procedure is hazardous in that it causes a controlled tear of the lower esophageal sphincter. Complete rupture of the lower esophagus will result in mediastinitis and/or peritonitis. However, good results are obtained in approximately 75% of cases when performed by an experienced operator.[15] It is of note that this procedure cannot be performed in long-standing achalasia because of massive dilation of the esophagus interferring with correct placement of the balloon tip. When the esophagus is dilated or tortuous or the balloon dilation is not successful, surgery is indicated. A longitudinal myotomy (Heller myotomy) is done in the region of the lower esophageal sphincter dividing the circular muscle down to the mucosa. Since this procedure essentially abolishes the lower esophageal sphincter and patients with achalasia have no peristalsis to empty their refluxed gastric acid, an anti-reflux procedure is commonly performed in the same operation.[15] About 80% of patients undergoing a Heller myotomy will have symptomatic relief.

Diffuse Esophageal Spasm

The syndrome of idiopathic diffuse esophageal spasm is an entity which is poorly understood. Its pathogenesis is completely unknown. Pathological specimens from patients having diffuse spasm show muscular thickening in the lower esophagus and normal ganglion cells interspersed.[13] Some investigators have found nonspecific degenerative changes in the vagus nerve, but no definite conclusions have been made. Reports of nuclear degeneration in the dorsal motor nucleus of the vagus have been made, but are also non-conclusive. As in achalasia, esophageal contractions are markedly enhanced with cholinergic agents and gastrin, suggesting denervation hypersensitivity.[16]

Clinically, diffuse esophageal spasm usually occurs in an older age group than does achalasia. Patients typically complain of dysphagia and pressure-like substernal chest pain. The pain may mimic angina pectoris and may awaken the patient at night from sound sleep. Diffuse spasm rarely causes regurgitation of ingested matter while this is very common in achalasia. Very hot or very cold liquids frequently precipitate spasm. Like patients with achalasia, those with diffuse esophageal spasm have an enhanced response to Mecholyl. Peristalsis is present in diffuse spasm and the lower esophageal sphincter may be slightly increased, but it relaxes normally to baseline on deglutition. High amplitude, repetitive contractions in the mid-esophagus occur in at least 30% of swallowing attempts in patients with spasm. These contractions are not seen in achalasia. A

barium swallow may reveal a non-dilated esophagus with multiple areas of contractions and no beak defect in the lower esophagus as seen in achalasia.

Esophageal motility studies reveal a normal upper esophageal sphincter and mildly hypertensive lower esophageal sphincter which relaxes normally to baseline on deglutition. The body of the esophagus exhibits multiple high amplitude, repetitive pressure waves with occasional normal peristalsis.

About 5% of patients with diffuse esophageal spasm develop a picture of achalasia over a prolonged period.[17] Indeed, the syndrome of vigorous achalasia with high lower esophageal sphincter pressure, aperistalsis and high pressure repetitive contractions in the body of the esophagus may represent a blend of achalasia and diffuse spasm.

The treatment of the syndrome of idiopathic diffuse esophageal spasm is controversial. Noxious stimuli should be avoided. These usually include hot and cold liquid or any other substance that historically precipitates symptoms. Dysphagia and chest pain occasionally respond to short or long acting nitrites such as are used with angina pectoris, but results are somewhat unpredictable.[18] Narcotics are often required and may present a problem in long term management. Some gastroenterologists have advocated the use of Maloney dilators or pneumatic dilation of the lower esophageal sphincter. If weight loss secondary to dysphagia or debilitating chest pain occurs, a long distal esophageal myotomy may be performed. Authors of a large series recently reported a 70-80% success rate in this operation in patients having diffuse esophageal spasm or ill-defined motility disorders of the esophagus.[19] Most gastroenterologists would be hesitant to submit patients to surgery before exhaustibly employing all modes of medical therapy.

Scleroderma

Of all connective tissue disorders, scleroderma or progressive systemic sclerosis has the most profound influence on esophageal motility. Approximately three-fourths of patients with progressive systemic sclerosis have esophageal involvement.[20] Patients who have Raynaud's phenomenon may have a form fruste of scleroderma. They manifest the same esophageal problem as the patients with advanced scleroderma.[21]

The pathogenesis of esophageal scleroderma has been partially elucidated. A double defect is present consisting of both the lack of peristalsis in the lower two-thirds of the esophagus and diminished pressure in the lower esophageal sphincter. Although it was initially postulated that increased collagen deposition in the esophageal wall, as occurs in other organs in scleroderma, might account for these abnormalities, manometric and pathologic correlations have suggested that motility defects precede overt fibrosis.[20,21] Pharmacologically, patients with scleroderma have a normal response to Mecholyl, indicating that the defect is not in the esophageal musculature or at the neuromuscular junction of the cholinergic receptors. When an anticholinesterase such as Edrophonium is given, however, a decreased response is noted. This implies that the motility defect is secondary to malfunction of the nerve innervating the esophageal musculature rather to neuromuscular causes.[20,21]

Esophageal motility studies in patients with scleroderma reveal low amplitude waves that are usually not propagated by a swallow. There may be complete lack of peristalsis in late disease. The lower esophageal sphincter is essentially non-existent or of very low pressure. Consequently, patients with progressive systemic sclerosis have a severe defect in smooth muscle contractility. Since there is essentially no barrier to reflux of gastric acid and enzymes the esophagus can not clear any refluxed material. These patients have an ideal setup for the development of severe reflux esophagitis.

Dysphagia is the most common presenting complaint, being present in 60-70% of patients with the disease. Symptoms do not seem to correlate with the degree of esophageal motility dysfunction, however. The patients studied serially show progressive deterioration of motility despite improvement in cutaneous scleroderma. In patients with Raynaud's phenomenon alone there seems to be little correlation between the length of time that Raynaud's symptoms have been present and the severity of the esophageal motility disorder.[21]

Barium x-rays of the esophagus showed mild dilation, free reflux, and an absence of peristalsis.

There is no satisfactory treatment for this disorder. Medical therapy consists of vigorous anti-

reflux measures with frequent antacids and elevation of the head of the bed during the time which the patient is in a supine position. Cimetidine has proven efficacy in this disease state, but it requires continuous therapy. Metoclopramide, a dopamine antagonist has been proven in several studies to increase lower esophageal sphincter pressure and enhance esophageal peristalsis in patients with scleroderma.[22] It currently appears to be the best hope for prevention of esophagitis and stricture, although it is not yet been approved by the FDA for this indication.[20,22]

Multiple surgical procedures have been done to prevent reflux and correct or reset strictures. If a fundoplication is done care must be taken not to make it too tight, since the lack of peristalsis may compound the problem of partial obstruction created by the fundoplication. Interposition of the jejunum or gastroesophagostomy may be necessary if a severe stricture exists. In general, a full course of medical therapy including dilation with bougies is recommended before surgery is contemplated.

Miscellaneous Disorders of Esophageal Motility

Diseases affecting skeletal muscle or the innervation thereof can interfere with peristalsis and coordination in the upper esophagus. In myasthenia gravis, myotonic dystrophy, thyrotoxicosis, and dermatomyositis patients have incoordination of deglutition as well as reflux of ingested foods.

Recently, kindreds of patients with idiopathic intestinal pseudoobstruction have been described with esophageal motility disorders. Some patients have aperistalsis with failure of lower esophageal sphincter relaxation, but in contradistinction to achalasia have normal lower esophageal sphincter pressure.[23] The defect is presumed to be either secondary to denervation, to myogenic dysfunction, or both.[23]

The subject of lower esophageal sphincter incompetence and reflux esophagitis is too broad to consider in this brief review. It is clear that decreased lower esophageal sphincter pressure leads to reflux of gastric contents, but the role of a hiatal hernia in reflux esophatitis is still somewhat controversial.[24]

Advances in diagnostic modalities in the past 15 years have enhanced understanding in the area of esophageal physiology. The promise of new therapeutic agents based on past physiological principles is clearly on the horizon.

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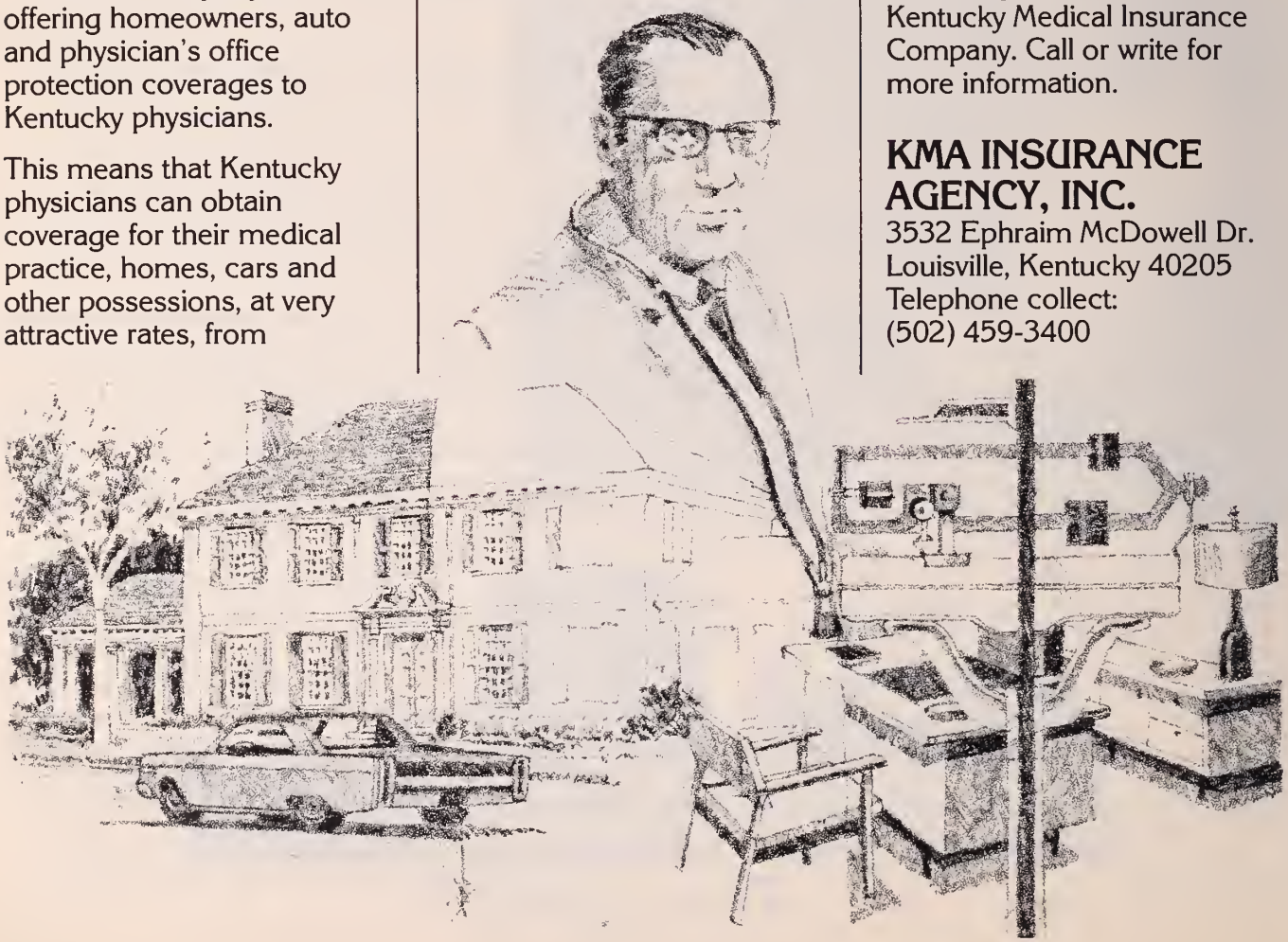
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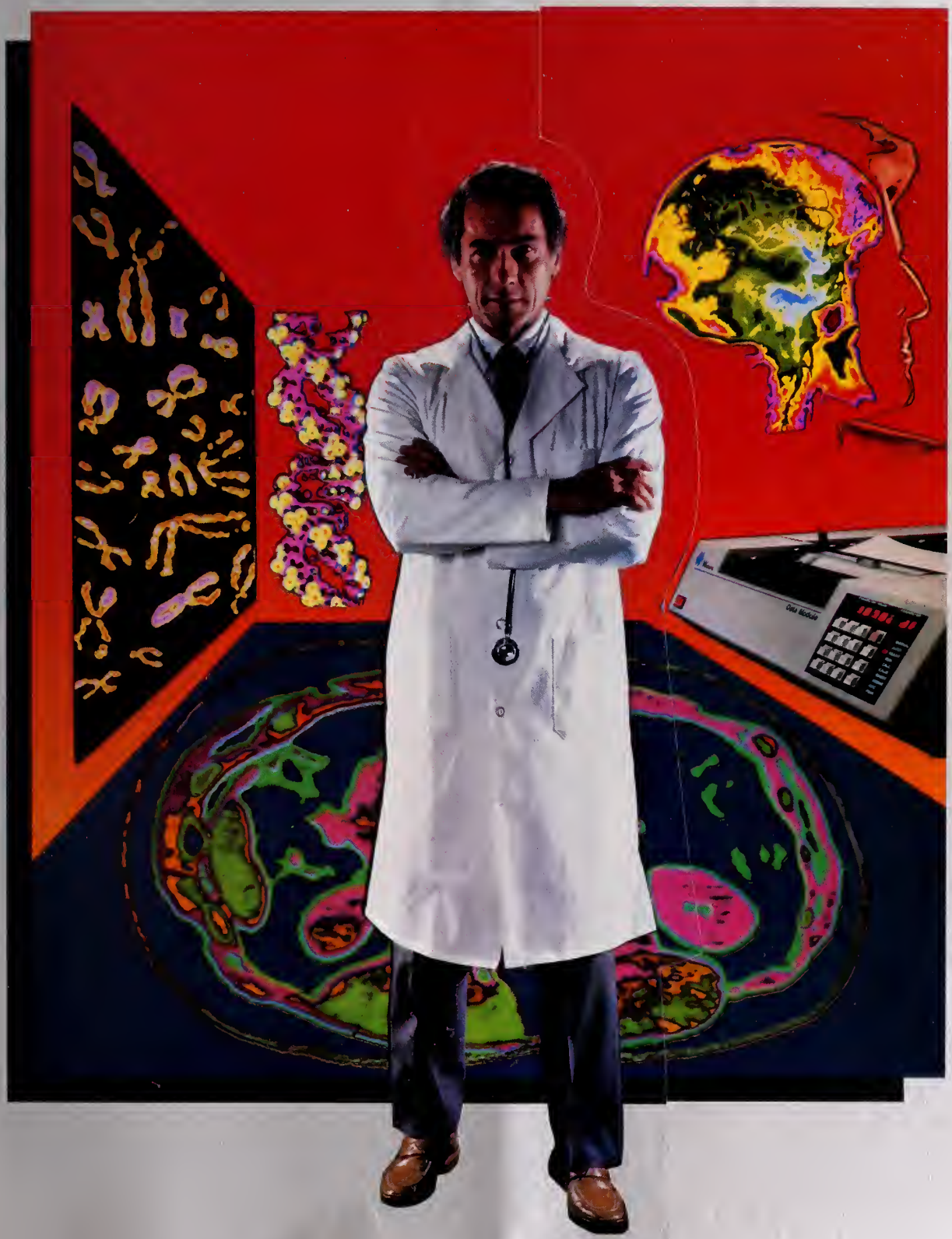
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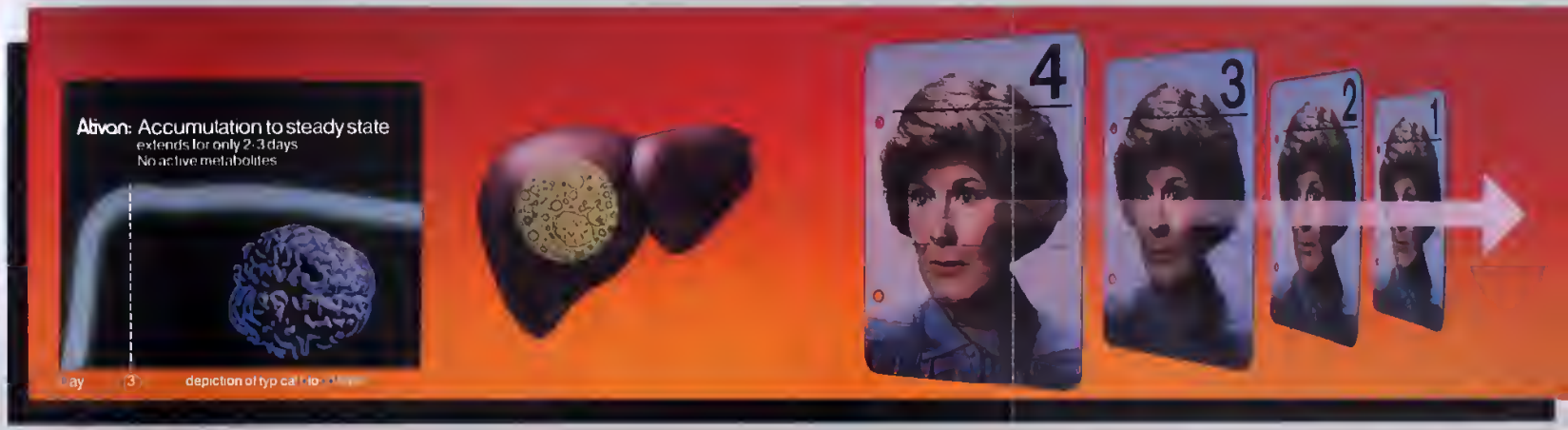
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Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

Wyeth Laboratories Philadelphia, PA 19101

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EDITORIAL

THERE is no lack of discussion about the problems besetting university teaching hospitals and medical care for the indigent in this country. The publicity which has accelerated recently concerning Louisville and its University Hospital represent but one example of an ever broadening concern for those involved in health care delivery. Central to a solution to this problem are relationships of the medical schools and their clinical faculty to the community of physicians and hospitals, all essential to the health care of the populace.

Doctor Leighton Cluff from the Robert Wood Johnson Foundation, in a timely article appearing in the January 8, 1982, issue of the *Journal of the American Medical Association,* addresses these matters of medical education and health care—especially for the indigent, in excellent fashion.[1]

As Doctor Cluff points out, significant changes in the budgets of medical schools, in the role of community hospitals in medical education, in the increase in full-time medical school faculty in private practice and the advent of Medicare-Medicaid have contributed to new relationships between medical schools and communities.

Some interesting statistics support these observations. In 1966, there were 517 community hospitals affiliated with medical schools; in 1976, there were 1,168. In 1960, patient care revenue as a source of support for medical school operations was $13 million; in 1976, the amount was $514 million. In 1960, the number of full-time faculty was 11,224; in 1977, the number of full-time medical faculty was 44,762.

Doctor Cluff offers some suggestions in dealing with the conflicts that exist between medical school faculties, community physicians and hospital administrators. These suggestions are far-reaching; some have been publically addressed; some may be impractical. Among others, Doctor Cluff offers the following:

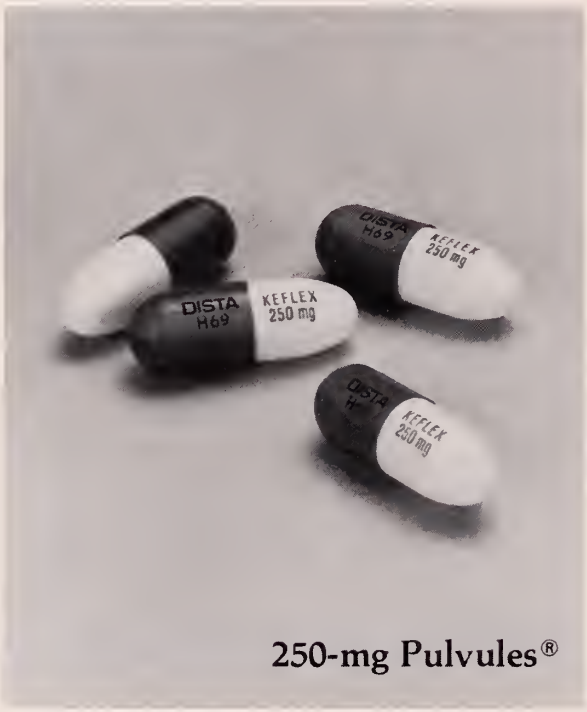
1. Community physicians should have admitting privileges to the principal teaching hospital and contribute to the educational and patient care responsibilities of the medical school.
2. There should be better cooperative arrangements with community physicians and medical schools in helping teaching hospitals meet the medical needs of the poor.
3. Community physicians with an interest and the ability to pursue research and teaching should be permitted to join the full-time faculty.

Those concerned with formulation of health care delivery in Kentucky recognize that changes are demanded and will come. Hopefully, they will be made in some spirit of cooperation and in the interests of serving the sick.

G. Randolph Schrodt, M.D.

References Cluff LE: Medical schools, clinical faculty, and community physicians, *JAMA,* 247:200-202, January 8, 1982.

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Mrs. Dvorsky

The Auxiliary to the Kentucky Medical Association will hold its 60th Annual Convention April 20-21 at Kentucky Dam Village State Park in Gilbertsville, Kentucky. Convention is a memorable time for Sharing the Sunshine we have been spreading throughout our Counties, our State, and nationwide. We extend a special invitation to all physicians' spouses to come join us, and enjoy an enriching experience, plus the fellowship of other Auxilians.

The Auxiliary is extremely honored to have as its guest the President of the American Medical Association Auxiliary, Mrs. Harry S. Dvorsky of San Leandro, California. Mrs. Dvorsky will be addressing the House of Delegates as well as installing the officers for the 1982-83 year.

CONVENTION — 1982
Kentucky Dam Village State Park
Gilbertsville, Kentucky
Service Is Our Sunshine

MONDAY, APRIL 19 (CST)

12:00 Noon - 2:00 PM Budget Meeting

2:00 PM - 4:00 PM Planning Committee

6:30 PM Dinner, "ON CALL"

TUESDAY, APRIL 20

9:30 AM Registration and Set up Exhibits

9:30 AM - 11:00 AM Pre-Convention Board Meeting
Convention Center

11:30 AM - 1:00 PM Luncheon on Belle of the Lakes

1:30 PM - 4:30 PM AKMA House of Delegates Session
AMA-ERF Silent Auction Throughout Convention
Convention Center

6:00 PM - 7:00 PM Reception Honoring President Elect
Mrs. Allen Sklar, and the 1982-83
AKMA Officers, Fayette County Hosting
Convention Center

7:00 PM Dinner Honoring Past AKMA Presidents
and the 1981-1982 County Presidents
Installation of 1982-1983 Officers
Program, Convention Center

WEDNESDAY, APRIL 21

8:00 AM Breakfast, Lodge

9:00 AM - 11:00 AM Post Convention Board Meeting
1982-1983 Board, Lodge

12:00 Noon Check-out Time

Meal Reservations, Pre-Registration, and Hotel Reservation Information in the March Issue of the "Bluegrass News."

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In the treatment of impetigo–

- **100% cure rate with Tegopen®** (cloxacillin sodium)
- **only a 60% cure rate with penicillin V-K**



As seen on admission



After one week of penicillin V-K therapy



Two weeks after initiation of TEGOPEN therapy

Treatment failure was judged to have occurred when lesions increased in size and/or number during the initial week of treatment with penicillin V-K. *No* treatment failures occurred with Tegopen.

*Data on file, Bristol Laboratories.

Brief Summary of Prescribing Information

TEGOPEN®
(cloxacillin sodium)
Capsules and Oral Solution

For complete information, consult Official Package Circular. (12) 9/11/75

INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® (*cloxacillin sodium*)	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus* and *Streptococcus pyogenes	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup These were all called by telephone, and their families reported the lesions had healed. One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus,* 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes,* and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

TEGOPEN®
(cloxacillin sodium)
–effective therapy for staph infections of the skin and skin structures

WARNING:
Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:
The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:
Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy.

USUAL DOSAGE:
Adults: 250 mg. q.6h.

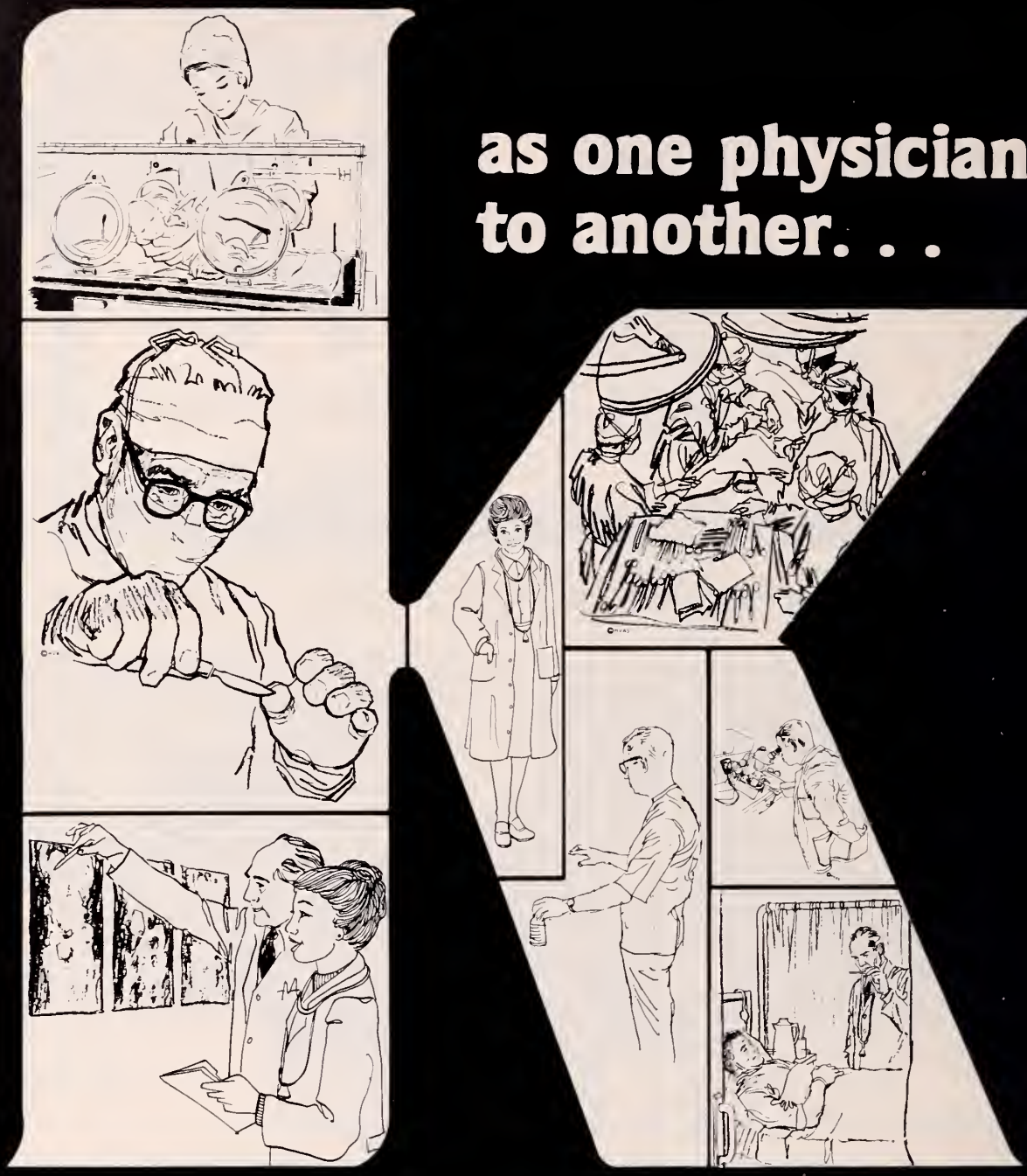
Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

SUPPLIED:
Capsules—250 mg. in bottles of 100. 500 mg. in bottles of 100.
Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.

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Stephen Z. Smith, M.D.
Assistant Scientific Editor

BOOK REVIEWS

Clinical Cardiology

Maurice Sokolow, M.D. and Malcolm B. McIlroy, M.D.
Lange Medical Publications, 1981

Originally published in 1977, *Clinical Cardiology* is now in its third refurbishing and continues to house an excellent synopsis of cardiology. The student will take a liking to the initial chapters which in sequence discuss anatomy and physiology, history taking, physical examination and investigatory techniques, and finally therapeutic procedures. Excellent hand-drawn illustrations, schematic drawings, graphs and tables are sprinkled throughout the text, facilitating understanding of the material. Each subject is highlighted with bold print headings, making quick perusal possible. This is not a "how to" book, however. The details of procedures are rightfully omitted, the intent of the book never to be as a handbook.

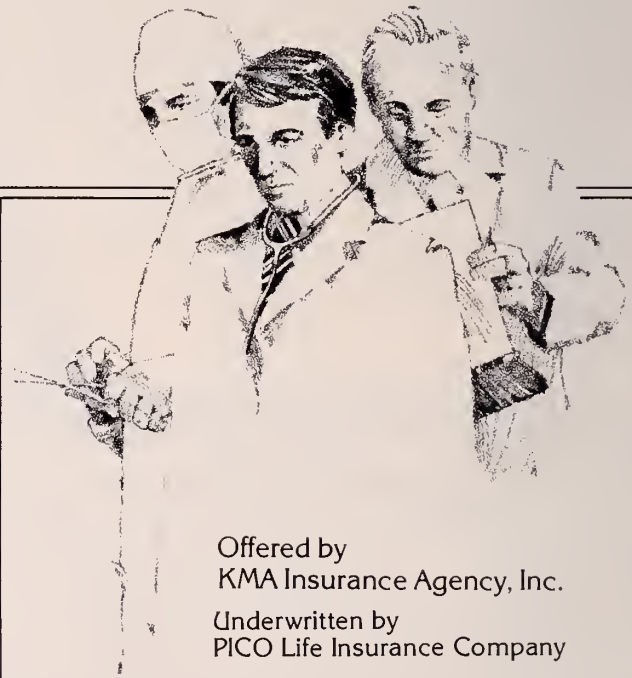
The heart of the book is consumed with diseases of the cardiovascular system. Coronary artery disease with many recent references again holds the spotlight, but deserves it. The photographs of pathological specimens are unnecessary and of marginal quality. Valvular disease and its frequent precursor, congenital heart disease, are thoroughly discussed though the references are somewhat dated. Conduction defects and arrythmias are presented in tandem, very helpful in sorting out what at times is a human Rubic's cube. Myo and pericardial diseases are thoroughly discussed, with surprising eccumenical equality to their more renown coronary and valve problems. Several concluding chapters are appended—especially a superficial chapter on cardiac disease and surgical patients.

There are complete and modern references at each chapter's conclusion, definitely mapping a route through the prodigious cardiac literature.

Clinical Cardiology bears a rightful place alongside its sibling Lange publications. A moderate price, a clear style and efficient presentation of information are testimony to its worth.

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DESCRIPTION: Each gram contains: Aerosporin® (Polymyxin B Sulfate) 5,000 units, bacitracin zinc 400 units, neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs; in tubes of 1 oz and ½ oz and 1/32 oz (approx.) foil packets.

INDICATIONS: *Therapeutically* (as an adjunct to systemic therapy when indicated), for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection. *Prophylactically*, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing.

CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

When using neomycin-containing products to control secondary infection in the chronic dermatoses, it should be borne in mind that the skin is more liable to become sensitized to many substances, including neomycin. The manifestation of sensitization to neomycin is usually a low grade reddening with swelling, dry scaling and itching; it may be manifest simply as a failure to heal. During long-term use of neomycin-containing products, periodic examination for such signs is advisable and the patient should be told to discontinue the product if they are observed. These symptoms regress quickly on withdrawing the medication. Neomycin-containing applications should be avoided for that patient thereafter.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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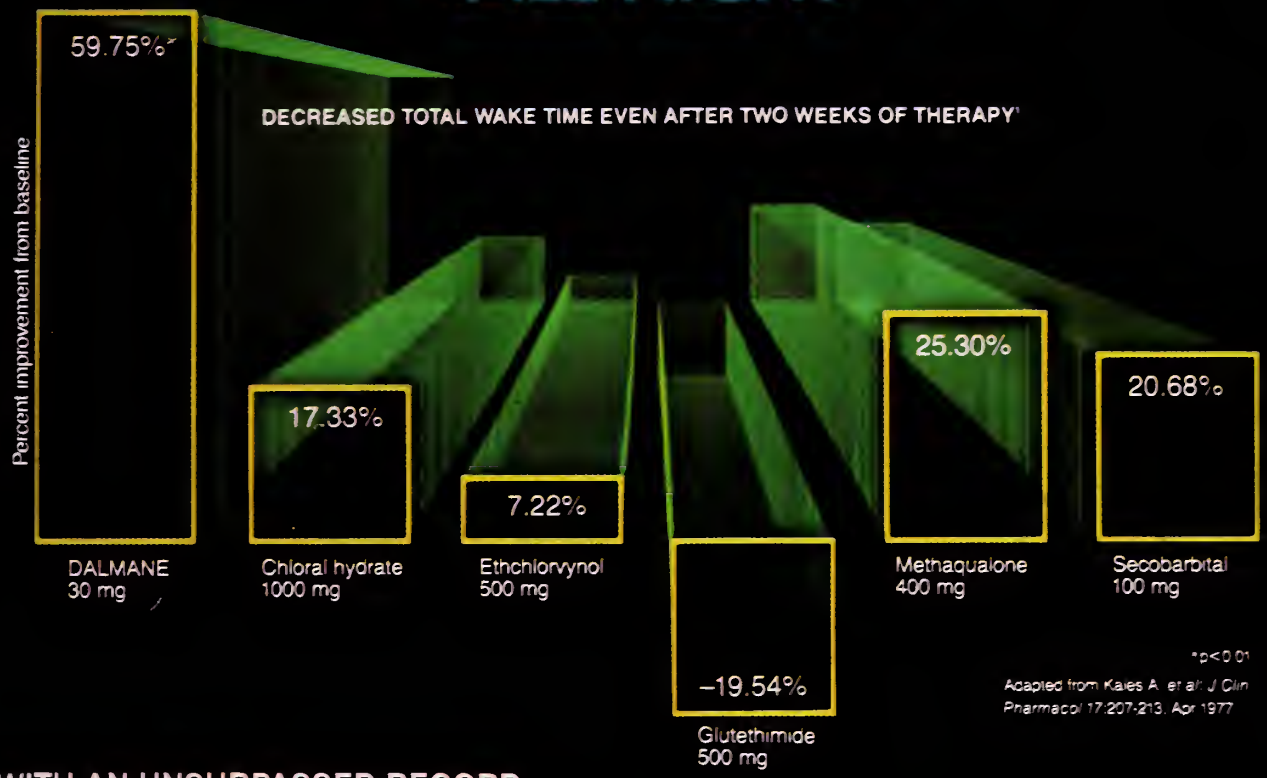
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9043-4 July 198

EFFECTIVE ALL NIGHT



WITH AN UNSURPASSED RECORD OF EFFICACY AND SAFETY

The efficacy of Dalmane (flurazepam HCl/Roche) has been documented in 185 studies involving 9141 patients suffering from one or more of the three major forms of insomnia–difficulty falling asleep, staying asleep and sleeping long enough.[2]

Relative safety was demonstrated in a large study of 2542 hospitalized medical patients. Only 3.1% of these patients reported adverse reactions–predominantly unwanted residual drowsiness. None of the reactions were considered serious by attending physicians.[3]

FOR SLEEP WITHIN 17 MINUTES[2] AND NO WORSENING OF SLEEP ON DISCONTINUATION

Rapid sleep induction, within 17 minutes on average, sets the stage for insomnia relief. And, after discontinuation of Dalmane for periods ranging up to 14 nights, no worsening of sleep compared with baseline was observed.[4]

Should insomnia recur, the patient may require guidance in setting up a regular sleep program to help provide the optimum environment for the onset of natural sleep. If hypnotic therapy is required, it should be given for the shortest time at the lowest effective dose to achieve the desired goal.

Consider other medications the patient may be taking (including alcoholic beverages) and be aware of possible drug interactions. Please note that patients should be treated for underlying physical or psychological factors before therapy with a sleep medication is undertaken.

DALMANE® C IV

flurazepam HCl/Roche

THE STANDARD OF HYPNOTIC EFFICACY FROM THE LEADER IN SLEEP RESEARCH

ROCHE

Please see reverse side for a summary of product information.



SLEEP-SPECIFIC
DALMANE® (IV)
flurazepam HCl/Roche

One 15-mg capsule *h.s.*–recommended initial dosage for elderly or debilitated patients.
One 30-mg capsule *h.s.*–usual adult dosage
(15 mg may suffice in some patients)

THE STANDARD FOR HYPNOTIC EFFICACY WITH IMPORTANT ADDED BENEFITS

- Well tolerated[2]
- No chemical interference with many commonly ordered laboratory tests, including triglycerides, uric acid, glucose, SGOT, alkaline phosphatase and total protein[5,6] (See adverse reactions section of complete product information.)
- Compatible with chronic warfarin therapy; no unacceptable fluctuation in prothrombin time reported[7,8]

UNLIKE NONSPECIFIC MEDICATIONS USED FOR SLEEP

Tricyclic antidepressants

–which are *not* sleep specific,[9] yet are sometimes used in nondepressed patients for sleep

–which can cause transient insomnia in the elderly[10]

–which can require careful monitoring in cardiovascular patients[10]

–which have strong anticholinergic effects[10]

Antihistamines

–which are *not* reliable sleep-inducing agents[11]

–which may produce stimulation instead[11]

–which have anticholinergic effects[11]

Major tranquilizers

–whose side effects may be troublesome for nonpsychotic patients[12]

–where tolerance for sedation appears rapidly[12]

Dalmane does not cause significant worsening of sleep beyond baseline levels upon discontinuation.[4]

References: **1.** Kales A *et al J Clin Pharmacol 17* 207-213, Apr 1977 **2.** Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ **3.** Greenblatt DJ, Allen MD, Shader RI *Clin Pharmacol Ther 21* 355-361, Mar 1977 **4.** Kales A, *et al Clin Pharmacol Ther 18* 356-363, Sep 1975 **5.** Moore JD, Weissman L *J Clin Pharmacol 16* 241-244 May-Jun 1976 **6.** Spiegel HE Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ **7.** Robinson DS, Amidon EL Interaction of benzodiazepines with warfarin in man, in *The Benzodiazepines*, edited by Garattini S, Mussini E, Randall LO New York, Raven Press, 1973, pp 641-646 **8.** Warfarin Study Data on file Medical Department, Hoffmann-La Roche Inc., Nutley NJ **9.** Baldessarini RJ Drugs and the treatment of psychiatric disorders, chap 19, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6 New York, Macmillan Publishing Co Inc., 1980, pp 391-447 **10.** Cole JO, Davis JM Antidepressant drugs, chap 31 2, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2 Baltimore, The Williams & Wilkins Company, vol 2, 1976, pp 1941-1956 **11.** Douglas WW Histamine and 5-hydroxytryptamine (serotonin) and their antagonists, chap 26, in Goodman and Gilman's *The Pharmacological Basis of Therapeutics*, ed 6, New York, Macmillan Publishing Co Inc 1980, pp 609-646 **12.** Davis JM, Cole JO Antipsychotic drugs, chap 31 1, in *Comprehensive Textbook of Psychiatry II*, edited by Freedman AM, Kaplan HI, Sadock BJ, ed 2 Baltimore The Williams & Wilkins Company, vol 2, 1976, pp 1921-1940

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect.
Adults: 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients*: 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

ROCHE®
ROCHE PRODUCTS INC.
Manati, Puerto Rico 00701



In Vertigo

On Balance...

RU-VERT®

Each Tablet Contains:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

Clinically proven actions

- Antihistaminic
- Cerebral stimulant
- Vasodilator

Few side effects

- Vasodilation occasionally causes facial flushing which can be minimized by recommending that Ru-Vert® be taken following meals or with food.

Dosage

- One or two tablets three times a day

Please see next page for a summary of prescribing information

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BOOTS PHARMACEUTICALS, INC.
Shreveport, Louisiana 71106
Pioneers in medicine for the family



In Vertigo
On Balance...
RU-VERT®

See following prescribing information.

DESCRIPTION: Each tablet contains the following active ingredients:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

INDICATIONS: Ru-Vert is indicated as an adjunct therapy in the symptomatic treatment of acute or chronic vertigo.

CONTRAINDICATIONS: Convulsive disorders or known history of sensitivity to any of the listed active ingredients. Because of the vasodilating action of nicotinic acid, Ru-Vert should not be used in patients with hypotension.

WARNINGS: The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS: Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of Ru-Vert who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

Pheniramine maleate, like other antihistamines, may produce sedative side effects in certain patients.

Transient vasodilatation due to rapid absorption of nicotinic acid may produce facial flushing and a sensation of warmth. These effects may be ameliorated by recommending that Ru-Vert be taken following meals or with food.

ADVERSE REACTIONS: Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE: Drug dependence has not been reported with Ru-Vert.

OVERDOSAGE: Signs and symptoms of acute overdose may be due primarily from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage.

Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION: The recommended dosage of Ru-Vert for vertigo or motion sickness is 1 or 2 tablets three times a day with meals or light snacks.

This drug is not for use in children under 12 years of age.

HOW SUPPLIED:

Bottles of 100 tablets	**NDC** 0524-0060-01
Bottles of 300 tablets	**NDC** 0524-0060-03

Federal law prohibits dispensing without prescription.

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Shreveport, Louisiana 71106
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LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To the Editor:

I would like to take this opportunity to make some comments regarding the review of *Wide Neighborhoods, a story of Frontier Nursing Service* in the October 1981 issue of *Journal of the KMA*. I was intrigued by your description of the Frontier Nursing Service as a health maintenance organization. Currently the Frontier Nursing Service functions as a fee for service group practice in which nurse practitioners and physicians work in joint practice. Both physicians and nurses are salaried. This in no way resembles a health maintenance organization.

I am perplexed at your assumption that nurse practitioners are a "growing wave" to replace physicians in health care. A reading of Ms. Breckinridge's book demonstrates no hint of this assumption, nor is this the reality of nurse practice today. As I mentioned above, the model of health care proposed by Ms. Breckinridge is one of nurses working with physicians. The physician staff at the Frontier Nursing Service has grown from three of a decade ago to six Board Certified Physicians at present. Attempting to set up some sort of conflict between Nurse Practitioners and Physicians serves as a disservice to both professions. I have found that my personal satisfaction in the practice of internal medicine is enhanced by working with nurse practitioners, and I would invite your readers to read Ms. Breckinridge's book and visit Eastern Kentucky to determine what this model of practice actually represents. Unfortunately, your review reflects neither the substance of the book, nor the reality of the current practice.

Tim Carey, M.D.
Medical Director
Frontier Nursing Service
Hyden, Leslie County, KY

To the Editor:

I am a student member of the KMA in my third year at the University of Kentucky. Currently, I am on my psychiatry clerkship working with the Child Psychiatry Division. This division was recently selected as one of six sites in the United States to be awarded a $240,000 three-year grant from the Office of Human Development Services in Washington; D.C. The purposes of the grant are twofold. First, it is to aid in improving mental health services necessary for the evaluation and treatment of physically and/or sexually abused or neglected children and teenagers by training mental health and child protective service professionals throughout the state. Second, it will develop innovative treatment programs for families, including individual treatment, family treatment, and group treatment for children and adolescents.

Lane J. Veltkamp, M.S.W., Associate Professor of Clinical Social Work, Child Psychiatry Division, is the author and principal investigator of this grant. Phyllis Alexander, M.A. is the program coordinator.

I thought family practitioners, pediatricians or child psychiatrists might be interested in this new and additional resource available in Kentucky. Additional information and/or referrals of parents, children or entire families may be made by calling 606-233-6263 or 233-6001 between the hours of 8:00 a.m. and 5:00 p.m.

(Mrs.) Miriam L. David
Third Year Medical Student
University of Kentucky Medical Center

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Please let us know at least four weeks before changing your address.

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3532 Ephraim McDowell Drive
Louisville, Ky. 40205

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WILL SAVE MONEY WITH

Introducing

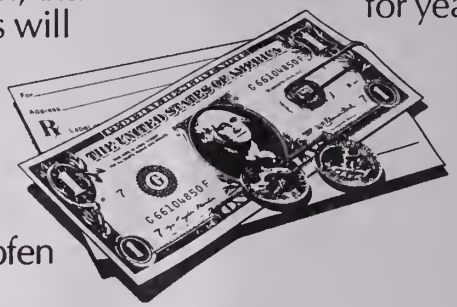
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$1.50 REBATE DIRECT TO YOUR PATIENTS ON EVERY PRESCRIPTION OF 100. REFILLS INCLUDED.

One dollar fifty cents returned for every Rebate Coupon your patients mail in.

Every bottle of 100 tablets of RUFEN 400 mg has a Rebate Coupon attached, with full instructions for redemption.

It has already been determined, through public opinion research, that most arthritic patients will appreciate direct rebate savings as much as they appreciate the results of ibuprofen therapy.



AND RUFEN IS PRICED LOWER TO BEGIN WITH.

Boots has already priced RUFEN lower to the wholesaler and the retailer. And if these savings are passed along, as they should be, your patient will receive the benefit of this lower price. Add these savings to the rebate, and your patients receive substantial relief from the costs of a medication many of them may take for years.

RUFEN IS NOT A GENERIC. BOOTS IBUPROFEN IS THE ORIGINAL.

And if you wish, RUFEN may be substituted for Motrin®, because it is bioequivalent.*

Original research by The Boots Company Ltd., of Nottingham, England, developed ibuprofen.

And though we introduced it ourselves elsewhere around the world, we licensed ibuprofen for sale in the United States.

Motrin® (ibuprofen) is a registered trademark of The Upjohn Compa

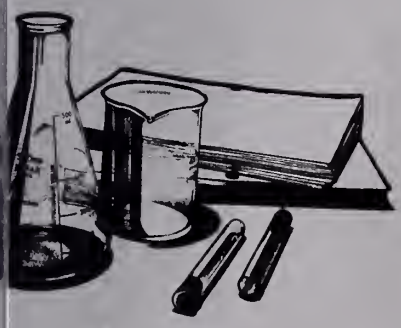
ARTHRITIC PATIENTS BUPROFEN THERAPY.

You first came to know it as Motrin (ibuprofen), manufactured by Upjohn.

Now, as we have established facilities in America, we hope you'll come to know Boots brand name for ibuprofen as RUFEN.

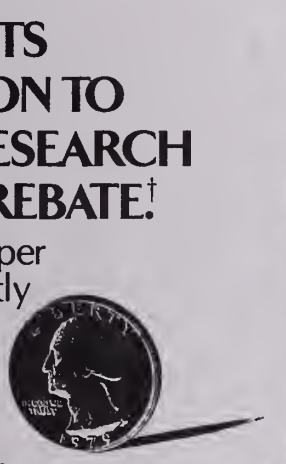
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†Contributions made to: International League Against Rheumatism.

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RUFEN® OFFERS A $1.50 REBATE DIRECT TO YOUR PATIENTS ON EVERY BOTTLE OF 100 TABLETS OF RUFEN 400 MG.

RUFEN COSTS YOUR PATIENTS LESS TO BEGIN WITH.

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RUFEN (IBUPROFEN) IS BIOEQUIVALENT TO MOTRIN® (IBUPROFEN).*

I hope we've given you several good reasons to remember RUFEN the next time you prescribe ibuprofen.

If we haven't, or if you'd like to know more about Boots Pharmaceuticals or this program, please don't hesitate to drop me a line. Or call us directly at our toll-free number: (800) 551-8119. Louisiana residents, call (800) 282-8671.

To ensure that your patients receive the benefits of the Rufen program, *be sure to specify* "D.A.W.," "No Sub," or "Medically Necessary," as required by the laws of your state.

Sincerely,

John D. Bryer, President
Boots Pharmaceuticals, Inc.

Boots Pharmaceuticals, Inc.
6540 LINE AVENUE, SHREVEPORT, LOUISIANA 71106

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*Data on file.

5/81

RF-009

RUFEN®
(ibuprofen/Boots)

(For full prescribing information, see package brochure.)

RUFEN® Tablets
(ibuprofen)

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angioedema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally; however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding.

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS

Incidence greater than 1%

Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4% to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). **Central Nervous System:** dizziness*, headache, nervousness. **Dermatologic:** rash* (including maculopapular type), pruritus. **Special Senses:** tinnitus. **Metabolic:** decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS).

*Incidence 3% to 9%.

Incidence less than 1 in 100

Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. **Central Nervous System:** depression, insomnia. **Dermatologic:** vesiculobullous eruptions, urticaria, erythema multiforme. **Special Senses:** amblyopia (see PRECAUTIONS). **Hematologic:** leukopenia, decreased hemoglobin and hematocrit. **Cardiovascular:** congestive heart failure in patients with marginal cardiac function, elevated blood pressure.

Causal relationship unknown

Gastrointestinal: Hepatitis, jaundice, abnormal liver function. **Central Nervous System:** paresthesias, hallucinations, dream abnormalities. **Dermatologic:** alopecia, Stevens-Johnson syndrome. **Special Senses:** Conjunctivitis, diplopia, optic neuritis. **Hematologic:** hemolytic anemia, thrombocytopenia, granulocytopenia bleeding episodes. **Allergic:** fever, serum sickness, lupus erythematosus syndrome. **Endocrine:** gynecomastia, hypoglycemia. **Cardiovascular:** arrhythmias (Sinus tachycardia, bradycardia, and palpitations). **Renal:** decreased creatinine clearance, polyuria, azotemia.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for relief of pain. Do not exceed 2,400 mg per day.

CAUTION: Federal law prohibits dispensing without prescription.

Boots Pharmaceuticals, Inc.
Shreveport, Louisiana 71106

School Health Committee and Auxiliary Promote Improved Health Education

The Committee on School Health, Physical Education and Medical Aspects of Sports and KMA Auxiliary are concerned with the lack of a comprehensive health education program in the Kentucky schools system (kindergarten to 12th grades).

As physicians, we all recognize the potential that education has for the reduction of health problems. We also recognize that the earlier the educational intervention, the more effective it will be. Obesity, smoking and drug abuse, accidents, adolescent pregnancy, risk-taking behaviors, poor self-esteem etc. are all potentially preventable with quality health education programs. While Kentucky requires schools in our state to have health education, it offers little guidance or control over the quality and content of these programs.

There are now a number of quality health education programs available to school districts. As physicians, we need to be informed as well as to advocate for these quality programs. The purpose of this statement is to inform you about one such program now starting in our state.

This health education curriculum is a comprehensive program for Kindergarten-seventh grades. It was developed and sponsored by the American Lung Association and the Bureau of Health Education and is called The School Health Curriculum Project. The premises for this program are that children are curious about themselves, can accept and treasure their individual bodies and differences, want to understand how their bodies work, benefit by sharing their thoughts and feelings, can learn from one another, respond enthusiastically to challenging subject matter if they can experience it, and that children are more likely to take care of their bodies and health if they value themselves. Features include:

1. Teachers attend a one-two week training seminar on how to teach the curriculum. Materials to use in the classroom are made during these sessions as well.
2. Multimedia learning centers with a "hands on" approach, integrated with other subjects, such as math, social studies, reading, writing and art.
3. Mental health and decision making skills included at all grade levels.
4. Each grade level reviews total body systems and focuses on one system in detail.
5. Sex education is included as part of the curriculum, not as an isolated subject.
6. Costs are comparible to text book costs for the school district.
7. Parent and community involvement is encouraged.

Teachers, parents, and children become excited about health education for the first time.

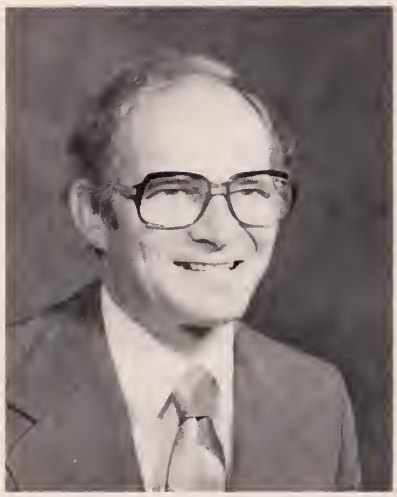
The local Medical Society was instrumental in getting this program started in the Scott County school district and now everyone is excited about it. You can have the same impact in your community by initiating this type of program. The committee on school health strongly encourages local physicians to support quality health education by becoming informed and involved. Your influence and involvement can mean a lot to the future health of children.

It appears likely that Eastern Kentucky University will be serving as a training site for this health education curriculum in Kentucky. Should you or your school district need further information, feel free to contact any of the following resource people.

Barry Gottschalk
American Lung Association
of Kentucky
P.O. Box 8405
Louisville, Kentucky 40208

Dr. Thomas L. Young
Washington Square
Georgetown, Kentucky 40324

Report of the 10th Trustee District



The 1982 officers of Fayette County Medical Society are:

John W. Garden, M.D.	President
Robert P. Belin, M.D.	Vice President
Preston P. Nunnelley, M.D.	Secretary-Treasurer
Edwin J. Nighbert, M.D.	President-Elect
Dennis B. Kelly, M.D.	Secretary-Treasurer-Elect
Thomas M. Jarboe, M.D.	Immediate Past President

John Garden, M.D. delivered a fine speech at the January meeting in which he outlined his plans for his term. One of his major objectives is to improve our rapport with the business community. In line with this plan he is developing a liaison committee with the Lexington Chamber of Commerce. This correlates well with KMA contacts with business through the efforts of Robert Howell, M.D. and others.

Fayette County Medical Society endorsed the candidacy of Fred Rainey, M.D., AMA delegate, for AMA Board of Trustees and included a financial contribution.

The 10th District Trustee meeting was held in October 1981 at the Hyatt Regency and spouses were invited. A good turnout of 210 people enjoyed an excellent talk on "Interpreting Economic Dreams" by Professor Marcus Morton, research economist from Indiana University.

After a hiatus caused by legal concerns, Fayette County Medical Society has resumed fee review as part of our peer review system.

Richard F. Hench, M.D.
Lexington

IMPORTANT NEWS ITEM

Soon we will be introducing some dramatic improvements in our professional disability income programs.

Please watch the mail. Read and compare! We have always felt that we had the best—now we know we do. If we sound confident, it's because we are.

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River City Mall
Louisville, Kentucky 40202
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Digest of Proceedings Board of Trustees December 16-17, 1981

The KMA Board of Trustees met in regular session at the KMA Headquarters Office on December 16-17, 1981. Reports were made by the President, Secretary-Treasurer, Senior Delegate to the AMA, President of Auxiliary to KMA, Secretary of the State Board of Medical Licensure, and Secretary of the Department for Human Resources.

Highlights of Board action taken at the meeting include:

- Appointment of a Coordinating Commission on Peer Review to study the adequacy of peer review activities in the state in the absence of PSRO.
- Referral of Department for Human Resources proposed changes to the School Health Code to the Committee on School Health for study.
- Authorization for the Quick Action Committee to submit a Resolution in opposition to the proposed Blood Resource Sharing Act which would move blood through the country on an as-needed basis.
- Referral of guidelines developed by the Jefferson County Medical Society in response to the prolificacy of "emergicenters" in the area to the KMA Emergency Medical Care Committee for review.
- Nomination of physicians to serve on several Governor appointed councils and committees.
- Approval of a report from the Committee on State Legislative Activities outlining legislation of interest to the Association.
- Appointment of a committee to investigate a situation in Christian County where some physicians have proposed withdrawal from the Pennyrile Multi-County Medical Society, and reformation of the Christian County Medical Society.

The Board members heard reports on the Kentucky Medical Insurance Company and KMA Insurance Agency, Inc., and it was reported both the Company and Agency have repaid all loans made to them by KMA.

It was also reported that plans are progressing for the addition to the KMA Headquarters Building, and construction may begin in May of 1982.

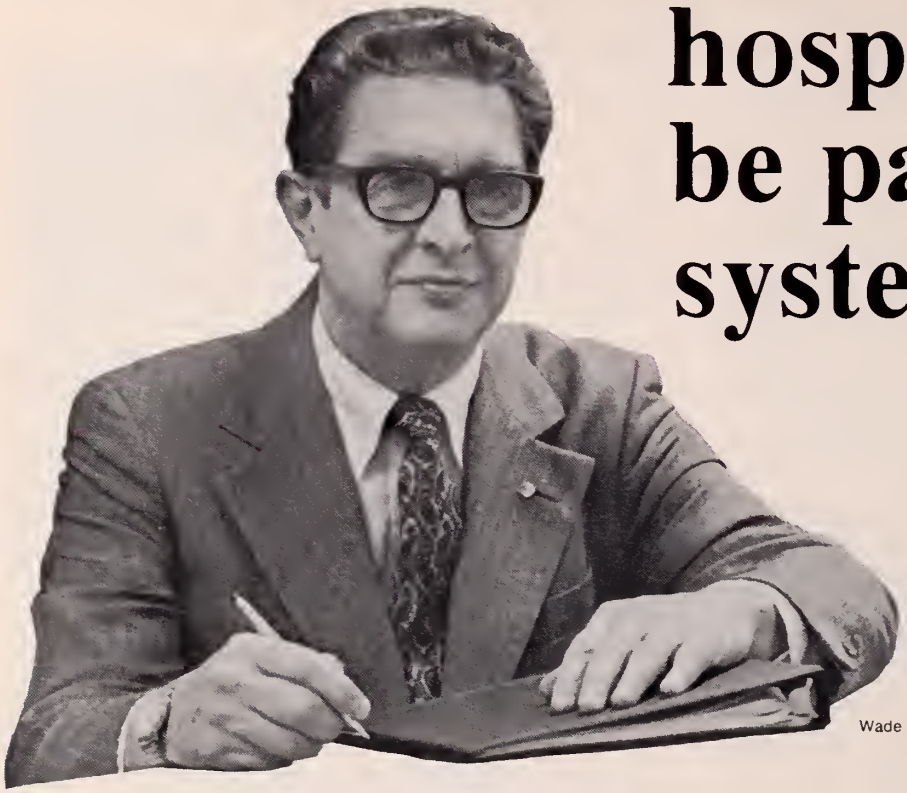
Thomas D. Stroud, Vice President of Kentucky Blue Cross and Blue Shield, presented rate renewal information for the KMA-endorsed Blue Cross/Blue Shield/Major Medical group plan for KMA members. Due to increased utilization by KMA members and substantial premium increases proposed, the Board voted to make changes in the present agreement by eliminating the current low option coverage, maintaining the high option coverage, and adding a comprehensive major medical program with a $300 deductible.

In other action, the Board passed a Resolution endorsing the Jefferson County Medical Society's project to restore the old medical school in downtown Louisville; asked the Bylaws Committee to propose a change that would conform KMA Bylaws to those of the AMA in regard to Life Membership; and made a recommendation to the Committee on Maternal and Child Health concerning funding of neonatal care in Kentucky.

The Board authorized a voluntary assessment for contributions to the Fred Rainey for AMA Trustee Campaign Fund; and appointed William B. Monnig, M.D., Erlanger, to fill an unexpired term of Thomas L. Heavern, Jr., M.D., Highland Heights, as a regional editor on the Editorial Board of the *Journal.*

The next scheduled meeting of the Board of Trustees was set for April 7-8, 1982, in Louisville.

Someday nearly all hospitals will be part of a system.



Wade Mountz, President, NKC, Inc.

The others will wish they were.

Nearly one-third of the nation's hospitals are already owned or managed by systems* that are designed to achieve superior results through better management of scarce resources.

Hospital administrators and boards that fail to recognize the complexities of operating a hospital in today's highly competitive environment are flirting with extinction. The fact is: Few hospitals can successfully go it alone.

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For further information on how NKC can help your hospital survive, contact William Galvagni, vice president.

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NKC, Inc. is a consolidation formed for excellence in patient-centered care.

* Twenty-nine percent of the nation's general community hospitals were in centrally managed multi-hospital systems in 1980. And this number is multiplying rapidly. (April 1981 issue, *Modern Healthcare)*

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Cyclapen®-W (cyclacillin) produces peak serum concentrations* almost four times higher and over one hour earlier.[3]

Cyclapen®-W is just as effective in otitis media, bronchitis, pneumonia, urinary tract infections and infections of skin and skin structures†.[3]

Cyclapen®-W produces a significantly lower incidence of diarrhea and skin rash.[3]

CYCLAPEN®-W
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Rapid onset of action with fewer side effects.

*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.
3. Data on file. Wyeth Laboratories.
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See important information on adjoining page.

Wyeth Laboratories
Philadelphia, Pa 19101

Compared to amoxicillin

Faster peak. Fewer problems.

. . . in infants and children

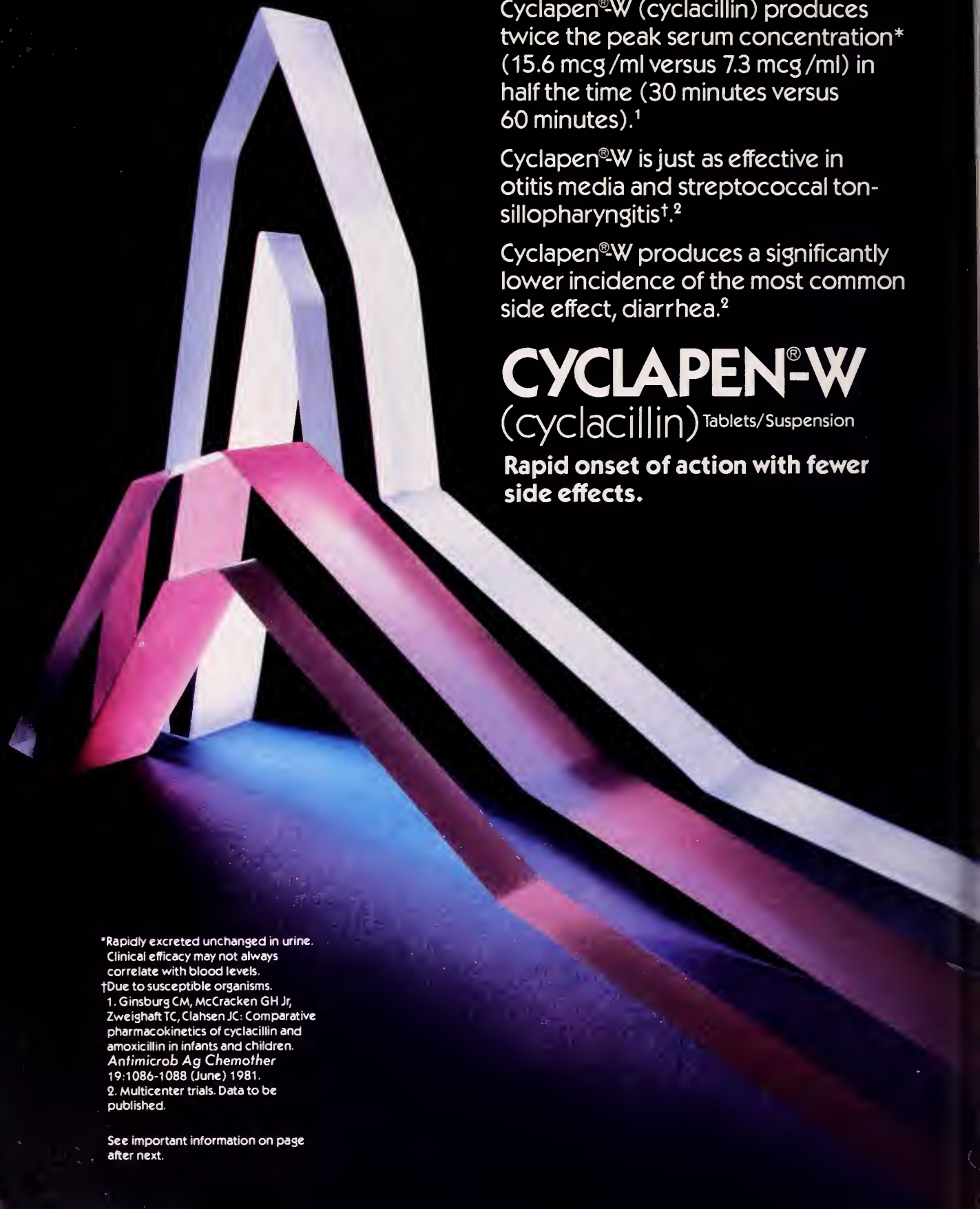
Cyclapen®-W (cyclacillin) produces twice the peak serum concentration* (15.6 mcg/ml versus 7.3 mcg/ml) in half the time (30 minutes versus 60 minutes).[1]

Cyclapen®-W is just as effective in otitis media and streptococcal tonsillopharyngitis†.[2]

Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

CYCLAPEN®-W
(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.



*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.
†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

See important information on page after next.

MEMBERS IN THE NEWS

J. S. Bean, M.D., Elizabethtown, Kentucky, celebrated his 104th birthday on February 13th. He was born in Hartford, Kentucky, where his father was a physician. Doctor Bean graduated from Louisville College of Medicine in 1904 and was a family practitioner for 70 years before he retired in 1974. He had offices in Grayson and Jefferson counties before he began his practice in Elizabethtown in the 1950's. Doctor Bean's son, Leonard Bean, a former mayor of Elizabethtown, is owner of Bean Publishing Company.



J. S. Bean, M.D.

Joseph C. Allegra, M.D. of Louisville has been elected to fellowship in the American College of Physicians. Doctor Allegra, a specialist in medical oncology, is a 1974 graduate of Penn State University College of Medicine and has been a resident of Louisville for two years and is on staff of the University of Louisville, University Hospital and Norton's Hospital. Election to the 53,000 member national medical specialty society signifies that a physician has been recognized by his colleagues as having obtained a level of medical scholarship and achievement in internal medicine.

David H. Neustadt, M.D., Louisville, Kentucky, has been chosen as President-Elect of the American Rheumatism Association Central Region at the Society's annual meeting in Chicago, November 5, 1981.

The Society is composed of rheumatologists and orthopedists from 17 states, Canada and Mexico.

Harold E. Resigner, M.D., Lexington, was elected to the Board of Trustees of the American Pathology Foundation. Doctor Resinger is a 1954 graduate of the University of Nebraska School of Medicine. The Foundation operates several educational meetings per year, and monitors and participates in activities that influence the independence of pathologists.

Postgraduate Opportunities

MARCH

1-3 50th Annual Assembly, The Southeastern Surgical Congress, Sheraton Hotel, Bal Harbour, Florida
8-10 Sixth National Nutrition in Pregnancy Seminar, University of Louisville, Health Sciences Center, Louisville
24-27 International Conference on Occupational Lung Disease, Hyatt Regency Chicago, Chicago, IL

APRIL

1 Twenty-seventh Annual Spring Clinical Conference, presented by the Lexington Clinic, Lexington
17 Using Laser in Glaucoma, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH
22-24 Eighth Annual High Risk Pregnancy Management Course, Hyatt Regency, Louisville, KY
23-25 Emergency Medicine for the Primary Care Physician, Fort Magruder Conference Center, Williamsburg, VA
26-28 ACEP Southeast Congress of Emergency Medicine, Practical Aspects of Emergency Management, Galt House, Louisville, KY

MAY

2-5 Trauma '82: Point-Counterpoint, The First Annual Eastern Tri-Regional Trauma Conference for Physicians and Nurses, Resorts International, Atlantic City, New Jersey
5-8 63rd Annual Meeting of the Virginia Society of Ophthalmology & Otolaryngology, Inc., Williamsburg Conference Center, Williamsburg, VA
14-15 Vitrectomy Course, University of Louisville, Health Sciences Center, Louisville
20 Allergy-Immunology Update, Hyatt Regency, Louisville, KY
20-22 Adolescent Gynecology, Hyatt Regency, Louisville, KY
20-23 Kentucky Surgical Society Annual Meeting, Lure Lodge, Lake Cumberland State Park, KY

JUNE

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA
13-18 Seventh Annual Family Medicine Review, Galt House, Louisville, KY

JULY

27-31 Fifth Annual Symposium on Contempory Clinical Neurology, Palmetto Dunes Hyatt Resort, Hilton Head Island, SC

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, 619 Oak Streer, Cincinnati, OH

OCTOBER

1-2 6th Annual Bethesda Hospital Extracapsular Cataract & Implant Seminar, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH
3 Cavitron Practical Extracapsular Lab, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH
6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204
29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer—Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA Office: 502-459-9790. Or call one of the committee members listed below.

David L. Stewart, M.D., Louisville, (502) 456-1891
Daniel W. Burke, M.D., Louisville, (502) 584-2421
Keene M. Hill, M.D., Horse Cave, (502) 786-2372
Thomas R. Miller, M.D., Lexington, (606) 277-9755
Charles Nichols, M.D., Pikeville, (606) 432-0191
James F. Rozelle, M.D., Hopkinsville, (502) 886-5163
Nat H. Sandler, M.D., Lexington, (606) 278-7811
Bruce A. Snider, M.D., Crestview Hills, (606) 341-5014

1982 KMA ANNUAL MEETING



Hyatt Regency, Lexington, Ky.
Sept. 20-23, 1982

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.
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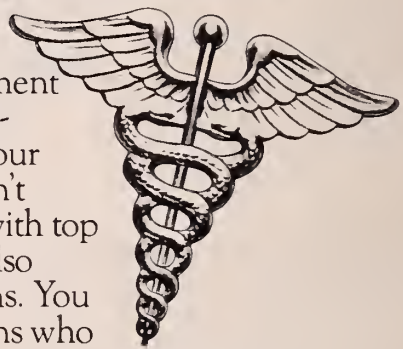
MEDICAL OPPORTUNITIES

MEDICAL DIRECTOR needed for Planned Parenthood in Louisville. Prefer strong background in Obstetrics and Gynecology. Send curriculum vitae to Kenneth Zegart, 801 Childrens Hospital Foundation Bldg., Louisville, 40202.

FAMILY PHYSICIAN, to permanently join two established physicians with a large practice in Middletown (Suburban Louisville). Modern office, full staff, including registered nurses, medical technologist, and x-ray facilities. Twenty minutes to hospital with open staff. Call 502-245-4168 or write Dr. Holmes and Johnson, 11518 Main Street, Middletown, Kentucky 40243.

EMERGENCY PHYSICIANS $80,000-$90,000. Medical Associates, Inc. is actively seeking new emergency room contracts and is in need of additional full time physicians both now and for the future in Kentucky. Full time positions will have a yearly compensation of $80,000 to $90,000. Currently, we also are interviewing candidates for directorships with the group. Annual compensation will be in the $100,000 range. If you are interested in one of these positions, call Paul T. Brizendine, M.D. or Frank H. Poschinger at 606-638-9663 or write to Medical Associates, Inc., P.O. Box 729, Louisa, Kentucky 41230.

CARE FOR YOUR COUNTRY.



As an Army Reserve physician, you can serve your country and community with just a small investment of your time. You will broaden your professional experience by working on interesting medical projects in your community. Army Reserve service is flexible, so it won't interfere with your practice. You'll work and consult with top physicians during monthly Reserve meetings. You'll also attend funded continuing medical education programs. You will all share the bond of being civic-minded physicians who are also commissioned officers. One important benefit of being an officer is the non-contributory retirement annuity you will get when you retire from the Army Reserve. To find out more, simply call the number below.

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Pioneers in medicine for the family

*Reference: 1981-82 *American Druggist Blue Book*

LP-042

1/82

Printed in U.S.A.

SU-TON®

Liquid Tonic

A Tonic for Geriatric Patients

A pleasant tasting tonic containing iron, vitamins, minerals, and an analeptic. Ideal for those who may benefit from vitamin deficiency prevention. Just one tablespoon before each meal.

DESCRIPTION Forty-five milliliters of SU-TON contains the following ingredients: Pentylenetetrazol 30 mg • Niacin, 50 mg • Vitamin B-1, 10 mg • Vitamin B-2, 5 mg • Vitamin B-6, 1 mg • Vitamin B-12, 3 mcg • Manganese (as Manganese Sulfate), 1 mg • Magnesium (as Magnesium Sulfate), 2 mg • Zinc (as Zinc Sulfate), 1 mg • Iron (as Ferric Pyrophosphate, Soluble), 22 mg • Alcohol, 18%

INDICATIONS AND USAGE SU-TON contains pentylenetetrazol which may be helpful in the older patient as an analeptic agent when mental confusion and memory defects are present. SU-TON also contains vitamins, trace minerals, and iron, for those patients who may benefit by preventing the development of a deficiency.

CONTRAINDICATIONS Epilepsy, convulsive disorders or known history of sensitivity to any of the listed active ingredients.

WARNINGS The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of SU-TON who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

ADVERSE REACTIONS Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE Drug dependence has not been reported with SU-TON.

OVERDOSAGE Signs and symptoms of acute overdose may be due principally from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage. Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION One tablespoonful (15 ml) 3 times a day 20–30 minutes before meals. This drug is not for use in children under 12 years of age.

HOW SUPPLIED Bottles of 473 ml (16 fl. oz.) NDC 0524-1015-16

Federal law prohibits dispensing without prescription February 1982

MANUFACTURED & DISTRIBUTED BY

BOOTS PHARMACEUTICALS, INC.
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Pioneers in medicine for the family



Bactrim™
(trimethoprim and sulfamethoxazole)
succeeds

Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



in recurrent UTI...
a continuing record of high clinical effectiveness against common uropathogens

in acute otitis media in children...
effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
clears the sputum and lowers its volume...on *b.i.d.* dosage

in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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Bactrim™ succeeds

in recurrent urinary tract infections*

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from site to source

Bactrim continues to demonstrate high clinical effectiveness in recurrent urinary tract infections. Bactrim reaches effective levels in urine, serum, and renal tissue[1]...the trimethoprim component diffuses into vaginal secretions in bactericidal concentrations[1]... and in the fecal flora, Bactrim effectively suppresses Enterobacteriaceae[1,2] with little resulting emergence of resistant organisms.

1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

Bactrim™ DS
160 mg trimethoprim and 800 mg sulfamethoxazole
DOUBLE STRENGTH TABLETS

maximizes results with B.I.D. convenience

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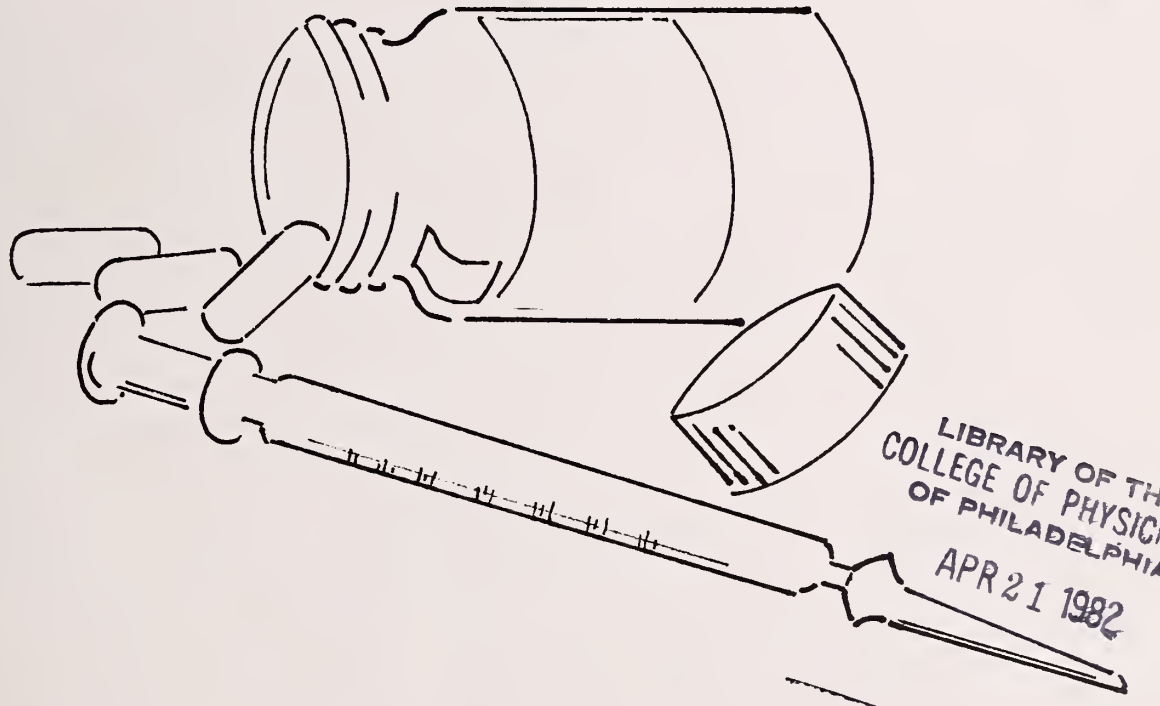
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Please see previous page for summary of product information.

STACKS

April 1982
Volume 80
Number 4

The Journal Of The Kentucky Medical Association



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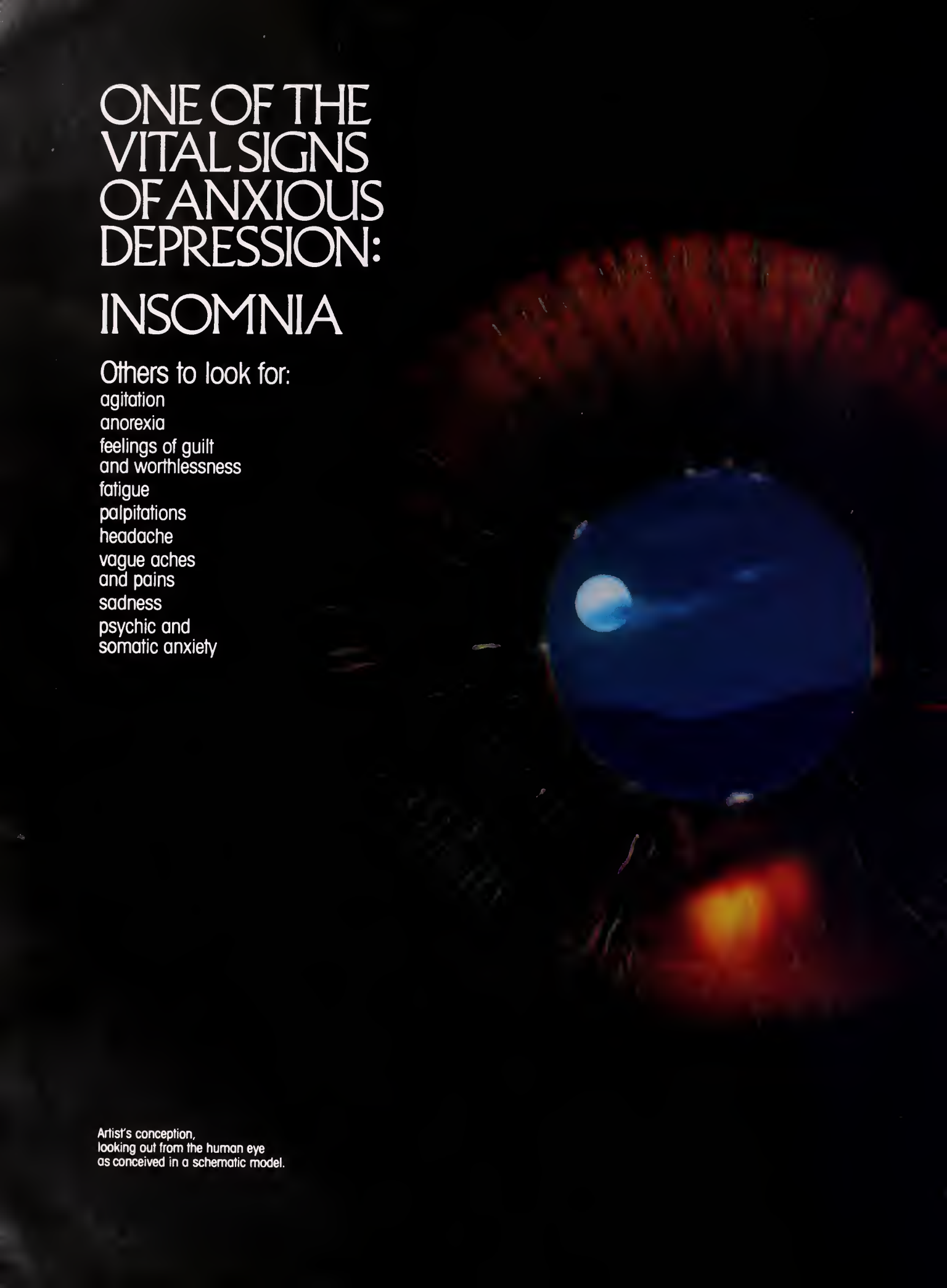
Sedative Drugs for Delirium Tremens p. 211

ONE OF THE VITAL SIGNS OF ANXIOUS DEPRESSION:

INSOMNIA

Others to look for:

agitation
anorexia
feelings of guilt
and worthlessness
fatigue
palpitations
headache
vague aches
and pains
sadness
psychic and
somatic anxiety



Artist's conception,
looking out from the human eye
as conceived in a schematic model.

ROCHE

LIMBITROL GIVEN H.S.: ONE OF THE VITAL SPECIFICS OF TREATMENT

Limbitrol brings a special—and specific—quality of relief to most anxious depressed patients. Insomnia, for example, responds with particular promptness. Other symptoms likely to respond within the first week of treatment include anorexia, agitation and psychic and somatic anxiety. And, as the depression and anxiety are alleviated, in many cases so are such related somatic symptoms as headache, palpitations, and various vague aches and pains.

Limbitrol given once daily h.s. may be the best approach

Many patients respond readily to a single bedtime dose of Limbitrol, a convenient schedule that may enhance compliance and helps relieve the insomnia associated with anxious depression. Limbitrol also offers a choice of other regimens: t.i.d., or a divided dose with the larger portion h.s. In all cases, caution patients about the combined effects with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as driving or operating machinery.

in moderate depression and anxiety

Limbitrol® 5-12.5 10-25

Tablets 5-12.5 each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)
Tablets 10-25 each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Specific therapy with h.s. dosage convenience

Please see summary of complete product information on following page.

LIMBITROL® TABLETS Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline; symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and blooting. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required. Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose* packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10, Prescription Paks of 50.

ROCHE®
ROCHE PRODUCTS INC
Manati, Puerto Rico 00701

Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Committee on Physicians' Health

The Journal Of The Kentucky Medical Association

USPS 280-700

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In an era of change,

An Agent of Change...





Your patients are changing

the population is getting older, more people are holding a second job, patients are more concerned about the medications they take

Medical knowledge is changing

there are diagnostic resources and surgical techniques undreamed of only a few years ago, biomedical engineering new insights also into the action of drugs

In this changing environment, the way you are practicing medicine is changing too...

Twenty years ago, the benzodiazepines represented a real step forward in the management of anxiety and tension states In recent years, however, concern about drug accumulation and clearance has led physicians to re-evaluate their use of these agents in light of current knowledge, many clinicians are changing from multi-metabolite benzodiazepines to Ativan® (lorazepam)—a metabolically and pharmacokinetically distinctive agent that offers clinical advantages which more closely meet the expectations of a modern anxiolytic

Ativan®: Agent of Change (lorazepam)



because...

it's shorter acting, with less accumulation*

In contrast to long-acting benzodiazepines, Ativan has a short, 12-hour half-life, and no active metabolites In multiple-dose therapy, Ativan accumulates for only two to three days before reaching steady state, the long-acting benzodiazepines—diazepam CIV, chlordiazepoxide CIV, clorazepate CIV and prazepam CIV—with their active metabolites—accumulate for as long as 20 days, increasing the likelihood of excessive sedation.

1 Klotz U Reimann I N Engl J Med 302 1012-1014 1980
2 Desmond PV Patwardhan RV Schenker S et al Ann Intern Med 93 266-268 1980
3 Patwardhan RV Yarborough GW Desmond PV et al Gastroenterology 79 912-916 1980
4 Sellers EM Naranjo CA Peachey JE N Engl J Med 305 1255-1262 1981
5 Ruffalo RL Thompson JF Segal JL South Med J 74 1075-1078 1981

*Pharmacokinetics cannot as yet be directly related to efficacy

†All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol

it doesn't interact with drugs metabolized by P450 microsomal enzymes

Most benzodiazepines undergo oxidative metabolism and thus utilize the hepatic microsomal enzyme system Ativan® (lorazepam), however, is metabolized by glucuronidation and does not compete with other drugs for cytochrome P450 Thus, when Ativan is given with Tagamet® (cimetidine), for example, clearance is not delayed, nor sedation increased†—unlike reported observations with patients on other benzodiazepines[1-5]

it gives you greater control of therapy

The short half-life of Ativan® facilitates more rapid response to dosage adjustments, allowing you to titrate therapy to patients' changing needs Also once you decide to discontinue Ativan, it will be out of your patient's system four days after the final dose- in contrast to long-acting benzodiazepines and their active metabolites which take as long as two weeks to be totally eliminated

Ativan® (lorazepam) (IV) for Anxiety

See important information on following page

Ativan®: Agent of Change

(lorazepam) Ⓥ



- Little accumulation lessens likelihood of excessive sedation
- Unlike most benzodiazepines, Ativan does not compete with other drugs, such as Tagamet® (cimetidine), for the microsomal enzyme system during biotransformation
- Metabolism not affected by age or liver dysfunction
- Short half-life provides greater control of therapy
- Promptly eliminated from patient's system after discontinuation
- Specifically evaluated and found effective for anxiety associated with cardiovascular and gastrointestinal disorders
- A distinctive change from long-acting benzodiazepines, all of which have active metabolites and are much the same

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS. Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; Insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

Wyeth Laboratories Philadelphia, PA 19101

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PRESIDENT'S PAGE

Concern and Hope

—two words which sum up the state of our nation and state of our profession.

Perhaps never before have we, as a nation, faced more difficult decisions as witnessed by the National Debate on Defense, social programs, economy, federal/state/local responsibility, medical care, and their future. While our hopes and dreams for the future might well be virtually identical, how to get there generates broad and adverse debate. President Reagan has proposed and promoted major change in that direction, a change of such magnitude that perhaps it has no equal. Most Americans would agree that we have not travelled a smooth road to success in recent years and certainly there are those who demonstrate apprehension that the "new road" may not lead us to our desired destination. But try we must and our hope must never fade.

Concern and Hope—they also sum up the state of our profession. Long I have yearned for the year problems facing medicine would be smaller in number and less in complexity than those of the preceding years, but that day has not yet come! When we win a hard fought battle it seems an even larger one inevitably looms on the horizon.

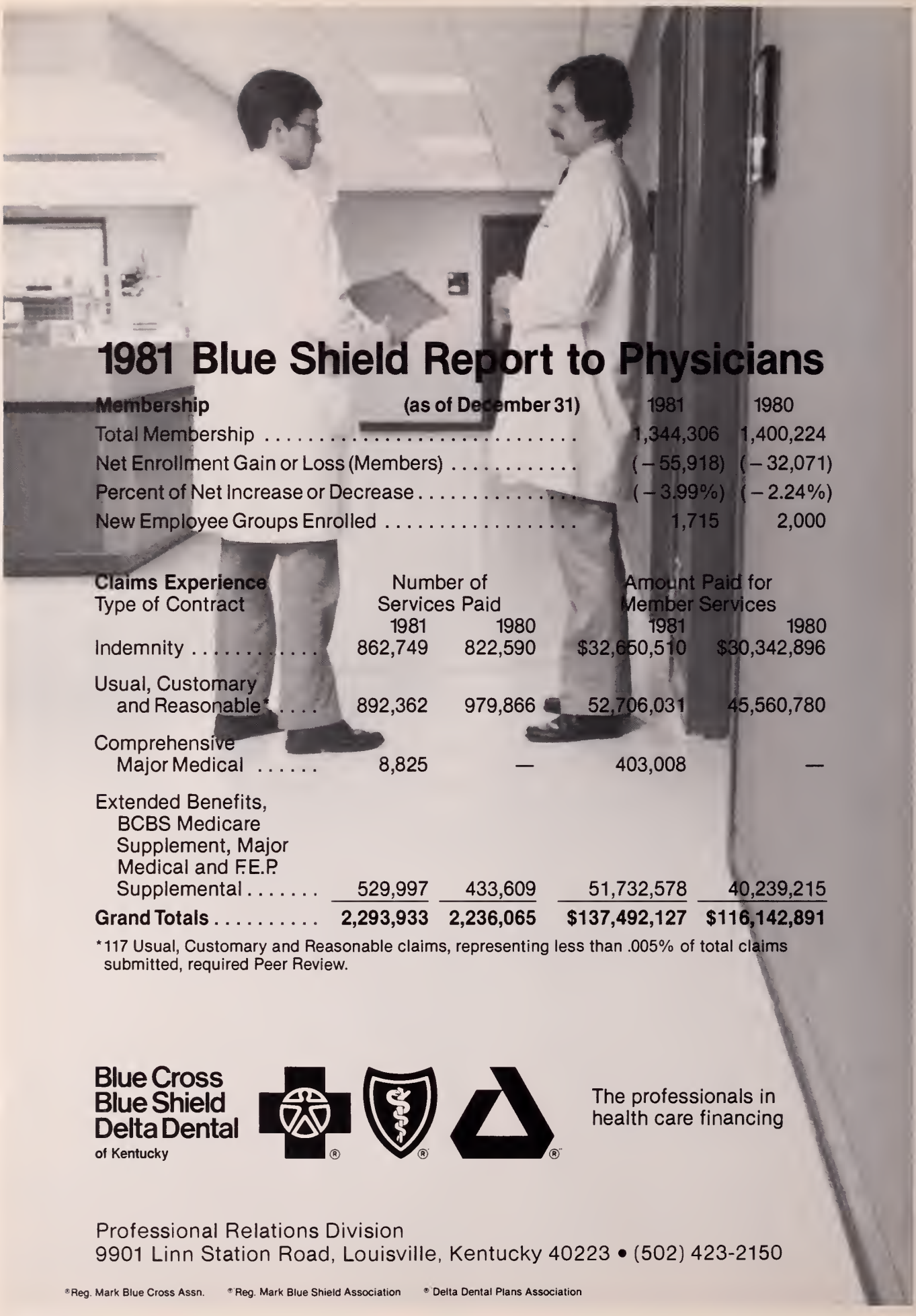
The theme at AMA's 1982 Leadership Conference was "A New Beginning." Consistent of that theme and demonstrating their ability to lead, the AMA Board of Trustees announced a bold initiative for the development of the new national health policy "which will provide proper care for our citizens within available resources." The cost of federal health programs has escalated far above government estimates (just as AMA warned they would!) and the programs are in such a state that additional "man-made repair" will simply not solve the problem. AMA position is that we now need to step back, reassess our needs, priorities, and means, and develop a new national health policy—one which is workable, productive, and affordable. While at this writing only a few days have passed since the AMA's announcement, favorable response has already come from Capitol Hill.

This is just one more demonstration which should send the message to all physicians that they should belong to AMA. I know of no other organization capable of such broad responsibility and representation of our profession. I often wonder why physicians who do not belong to AMA (KMA) do not get pangs of guilt. While our respective specialty societies are very important indeed, AMA as an umbrella organization is an absolute necessity to provide leadership for ALL physicians regardless of specialty. The AMA Council on Legislation invites all specialty societies to meet with the council on an annual basis, receiving input and advice from the specialties. Our most recent meeting with the specialty societies occurred just a few weeks ago. Attendance at this meeting by the specialty set a record and their level of interest and participation was the highest I can recall. I hope this is a clear signal that all specialty societies wish to support and be an active part of AMA.

In 1981 alone, AMA submitted testimony in Washington on 88 different occasions. While one may not agree with **every** AMA position or activity (Do you always agree with your spouse! And if not, do you walk away and refuse to participate?!), **surely** it is clear we would be without inner direction and much worse off without the efforts and successes AMA has produced. Success efforts on quality of care, accreditation of facilities/programs and freedom from more and more restriction/regulations benefit **all** physicians whether they belong to AMA or not—and those physicians who do pay their dues carry the entire financial burden for the profession. We could be a much stronger profession/organization if all physicians would pay their dues—both membership dues and personal time spent helping dissolve or nullify all those complex issues facing organized medicine.

In my opinion, there is no other arena where our profession and our patience can lose more or win

continued on page 219



1981 Blue Shield Report to Physicians

Membership (as of December 31)	1981	1980
Total Membership	1,344,306	1,400,224
Net Enrollment Gain or Loss (Members)	(−55,918)	(−32,071)
Percent of Net Increase or Decrease	(−3.99%)	(−2.24%)
New Employee Groups Enrolled	1,715	2,000

Claims Experience Type of Contract	Number of Services Paid 1981	Number of Services Paid 1980	Amount Paid for Member Services 1981	Amount Paid for Member Services 1980
Indemnity	862,749	822,590	$32,650,510	$30,342,896
Usual, Customary and Reasonable*	892,362	979,866	52,706,031	45,560,780
Comprehensive Major Medical	8,825	—	403,008	—
Extended Benefits, BCBS Medicare Supplement, Major Medical and F.E.P. Supplemental	529,997	433,609	51,732,578	40,239,215
Grand Totals	**2,293,933**	**2,236,065**	**$137,492,127**	**$116,142,891**

*117 Usual, Customary and Reasonable claims, representing less than .005% of total claims submitted, required Peer Review.

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In Vertigo

On Balance...

RU-VERT

Each Tablet Contains:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

Clinically proven actions

- Antihistaminic
- Cerebral stimulant
- Vasodilator

Few side effects

- Vasodilation occasionally causes facial flushing which can be minimized by recommending that Ru-Vert® be taken following meals or with food.

Dosage

- One or two tablets three times a day

Please see next page for a summary of prescribing information

MANUFACTURED & DISTRIBUTED BY

BOOTS PHARMACEUTICALS, INC.
Shreveport, Louisiana 71106
Pioneers in medicine for the family



In Vertigo
On Balance...
RU-VERT®

See following prescribing information.

DESCRIPTION: Each tablet contains the following active ingredients:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
Nicotinic acid	50.0 mg

INDICATIONS: Ru-Vert is indicated as an adjunct therapy in the symptomatic treatment of acute or chronic vertigo.

CONTRAINDICATIONS: Convulsive disorders or known history of sensitivity to any of the listed active ingredients. Because of the vasodilating action of nicotinic acid, Ru-Vert should not be used in patients with hypotension.

WARNINGS: The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS: Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of Ru-Vert who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

Pheniramine maleate, like other antihistamines, may produce sedative side effects in certain patients.

Transient vasodilatation due to rapid absorption of nicotinic acid may produce facial flushing and a sensation of warmth. These effects may be ameliorated by recommending that Ru-Vert be taken following meals or with food.

ADVERSE REACTIONS: Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE: Drug dependence has not been reported with Ru-Vert.

OVERDOSAGE: Signs and symptoms of acute overdose may be due primarily from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage.

Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION: The recommended dosage of Ru-Vert for vertigo or motion sickness is 1 or 2 tablets three times a day with meals or light snacks.

This drug is not for use in children under 12 years of age.

HOW SUPPLIED:

Bottles of 100 tablets	NDC 0524-0060-01
Bottles of 300 tablets	NDC 0524-0060-03

Federal law prohibits dispensing without prescription.

MANUFACTURED & DISTRIBUTED BY

BOOTS PHARMACEUTICALS, INC.
Shreveport, Louisiana 71106
Pioneers in medicine for the family

Watch for the 1982 KMA Membership Roster to be published in the July *Journal of the Kentucky Medical Association*

The Journal Of The Kentucky Medical Association

April 1982 Volume 80 Number 4

SCIENTIFIC

Sedative Drugs for Delirium Tremens

MYRON G. SANDIFER, M.D. AND GARY YARBROUGH, M.D.

Delirium tremens must be distinguished from early acute withdrawal. Sedative drugs for delirium tremens are briefly reviewed. No currently available drug will actually terminate delirium tremens. Benzodiazepines are the drugs of choice in most cases. A reliably absorbed intramuscular benzodiazepine would be a valuable addition.

"ALMOST every psychopharmacological agent introduced during the last 25 years, except the antidepressants, has been used in the treatment of delirium tremens."[1] What is the evidence favoring one drug over another?

One must first distinguish between acute, simple withdrawal and delirium tremens. Acute withdrawal usually occurs within a few hours of cessation or reduction of drinking and it is typically characterized by apprehension, a mild tremor and slight elevation of the systolic blood pressure. Two-thirds or better of these patients have clinical signs of intoxication and alcohol in the blood.[2] A drug which is cross-tolerant with alcohol is clearly preferred in the early withdrawal state to reduce the liklihood of withdrawal seizures.[3,4,5] Usually, but not invariably, delirium tremens may also be prevented by early intervention with a cross-tolerant drug. It hardly seems advisable to use alcohol, with its rapid metabolism (a "shot" an hour), for this purpose. The list of available cross tolerant agents is quite long, including both paraldehyde and the barbiturates, but most clinicians find one of the benzodiazepines (*eg*, Librium 50-200 mg/day) most satisfactory for this purpose.

From the University of Kentucky College of Medicine, Lexington, KY 40536

By contrast, delirium tremens classically begins the third day after cessation of drinking. Two-thirds or better of the patients have a marked tremor, agitation, rapid pulse, a degree or so of fever and, most importantly, disorientation and hallucinations. Subcutaneous hematomas and a palpable liver are also frequent findings. By the time delirium tremens develops, the likelihood of withdrawal seizures has substantially diminished[6]. Thus, the seizure prevention property of cross tolerant drugs, so important in early withdrawal, is no longer of prime importance in delirium tremens. It is reasonable, therefore, to consider antipsychotic drugs (*eg*, Thorazine) which are usually so effective in psychotic agitation from other causes. However, a review of some of the more carefully controlled studies shows that they are not clearly better than other sedatives.[1,7,8,13] Antipsychotics do not result in more seizures[7,8,9,10] but hypotension and temperature dysregulation may be a problem.[11,12] The antipsychotic drugs, therefore, are more usefully held in reserve for patients whose agitation is not controlled by other sedatives.

Among the more typically sedative drugs, personal choices exist. Barbital is used extensively in the Scandinavian countries,[1] but this drug is not available in the USA. Phenobarbital has the

advantage of being dependent on the liver for only 50% of its metabolism (the other 50% is by direct excretion by the kidneys), but among the barbiturates, pentobarbital is more widely used. In our experience, this drug, when used intramuscularly, is difficult to adjust between too little and too much. In the United States the benzodiazepines are unquestionably the preferred drugs.[14] If the patient in impending or actual delirium tremens is able to take oral medication, the benzodiazepines work in most cases. As a general policy in administering sedative drugs we prefer to start with smaller doses (*eg*, 50 mg of Librium) at frequent intervals (*eg*, q.3 h.). Usually after the second or third dose, the patient's sedative response can be determined. (Obviously, it is not always possible to proceed with the desired gradualness). If the patient is still quite agitated after 600 mg/day of Librium, the addition of an antipsychotic should be considered.

For patients who cannot be treated by the oral route, an intravenous method, using diazepam, has been found to be effective and has become widely accepted.[15] The principal drawback with the intravenous diazepam method is that it requires the physician's presence for administration and can be very time consuming. The recommended method (5 mg intravenously slowly every five minutes) requires an average of 45 minutes to one and one half hours of rather constant physician attention before a sufficiently calm state has been produced.

What about intramuscular benzodiazepines? Although still rather widely used, intramuscular diazepam[16] and chlordiazepoxide[17] are slowly or erratically absorbed. It is possible, too, that the margin of safety characteristically enjoyed by the benzodiazepines may be lost if there is a release of deposited benzodiazepine in a sudden burst, such as may occur with muscle activity. The authors have seen one case of respiratory arrest following the intramuscular injection of 600 mg of chlordiazepoxide over an eight-hour period. The availability of benzodiazepine which is promptly and reliably absorbed after intramuscular administration would be a valuable addition. Lorazepam (Ativan) holds promise in this regard.[18] A recent report from Australia found improvement with 5 mg of Ativan intramuscularly bid.[19] The patients were in various stages of withdrawal and it is not yet clear how effective lorazepam IM will be found to be in delirium tremens per se.

This brief review has focused on the use of sedatives in delirium tremens. Other measures—*eg*, thiamine, fluids, general care—are assumed to be instituted. There is no agent which will effectively terminate or shorten the duration of delirium tremens. The goal is a sufficient degree of calmness to allow good nursing care. Several drugs will accomplish this purpose. Among the sedatives, oral benzodiazepines have the advantage of safety and moderate effectiveness. They may need to be supplemented by antipsychotic agents. An intravenous diazepam method is described for patients unsuitable for oral medications. Newer intramuscular benzodiazepines (*eg*, lorazepam) hold some promise for the future.

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Valproic Acid and Thrombocytopenia Case Report

CHANDRAKANT C. PATEL, M.D., STEPHEN CHURCH, M.D. AND KATHLEEN M. REILLY, B.S.

Valproic acid (Depakene®) is a common drug used in the treatment of seizure disorders. A five-year-old white boy with uncontrolled seizures was started on valproic acid and developed bleeding from severe thrombocytopenia. Patients receiving this drug should be monitored closely for serious and sometimes potentially fatal side effects.

VALPROIC acid (Depakene®) is being used more often in the treatment of various seizure disorders and is particularly valuable in children with petit mal and mixed seizures. Recent reports have emphasized the effectiveness and relative safety of this drug, although its use may cause serious and sometimes fatal toxic reactions. Thrombocytopenia, hepatitis, pancreatitis and unexplained coma are the most serious consequences of valproic acid therapy. To our knowledge there have been no previous reports of severe thrombocytopenia in the american pediatric literature.

Case Report

A five-year-old white male was admitted to Norton-Children's Hospitals in October 1979 for evaluation of thrombocytopenia and uncontrolled seizures. The patient's mother related a history of petechiae on his legs since August of 1979. Also noticed were increased lethargy, decreased activity, poor appetite and an unsteady gait. There was no evidence of recent infection or trauma. At the time of admission, he was taking phenytoin (Dilantin®) 75 mg daily, phenobarbital 30 mg daily and valproic acid (Depakene®) 2000 mg daily. The valproic acid had been added in January 1979 and slowly increased to the present dose over six months.

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The patient was born at eight months gestation to a 19-year-old mother. The pregnancy was complicated with spotting in the last trimester. Labor was prolonged with a difficult forceps delivery secondary to cephalopelvic disproportion. The patient required resuscitation in the delivery room. In the newborn nursery, he developed hyperbilirubinemia from RH-incompatibility and subsequently required phototherapy. Exchange transfusion was not necessary.

There were three other past hospitalizations. At 14 months, he was admitted for an increased head circumference and was found to have mild ventricular dilation. At 21 months he underwent repair of a cleft palate. His last hospitalization was at four and one-half years of age for evaluation of seizures. During this admission he was started on phenobarbital and phenytoin.

Further history revealed a marked delay in all areas of development. The patient walked at three years of age but does not talk. The family history revealed a maternal cousin with a seizure disorder.

The physical examination on admission revealed marked hypotonia of all extremities. He had a clumsy gait but no specific ataxia. Other physical findings were low set ears, bilateral simian creases and rapid nystagmus in all gazes. Vital signs and measurements included: pulse 100/minute, respirations 24/minute, blood pressure 80/56 mm Hg, head circumference 53.5 cm (5th percentile), weight 32 pounds (<5th percentile) and height 41 inches (<5th percentile).

The laboratory evaluation revealed hemoglobin 9.4 gm%, hematocrit 29%, WBC 4900/mm^3 (normal differential), MCV 91, MCH 36.7, MCHC 32.5, platelet count 18,000/mm,^{3} rectic count

2.8%, serum iron 173 mg/dl, transferrin 196 ng/dl, folate 20 ng/ml (1.9-14 ng/ml), B12 2016 PS/ml (200-850 PS/ml), B6 5.6 ng/ml (3.6-18 ng/ml), SGOT 34 U/1, and SGPT 26 U/1. Coombs test (direct and indirect) and Australian Antigen screen were negative, prothrombin time and partial thromboplastin time were normal. His phenobarbital level was 18 mcg/ml and phenytoin level was 10.2 mcg/ml. Platelet antibodies were positive to four out of five antigens. Bone marrow aspirate showed decreased megakaryocytes with decreased platelet production. The red and white cell precursor series were normal.

Hospital Course

The patients hospitalization centered around two problems, hematologic abnormalities and seizure control. The valproic acid was discontinued on admission. His thrombocytopenia was followed with sequential platelet counts. His platelet count was 165,000/mm,^{3} 180,000/mm^3 and 215,000/mm^3 on the fourth, sixth and eighth day respectively following discontinuation of the drug. The thrombocytopenia and other hematologic abnormalities were felt to be secondary to his anticonvulsants and/or his nutritional status.

Various anticonvulsants were tried in an attempt to control his seizures. He was discharged on primidone (Mysoline®), clonazepam (Clonopin®) and phenytoin. Further adjustments were to be made on an outpatient basis.

Discussion

Valproic acid has gained acceptance as an adjunctive or alternate anticonvulsant in the treatment of various seizure disorders. It has the advantage of being structurally and pharmacologically unrelated to other anticonvulsants in use today.[1] Initial studies identified side effects which were considered to be relatively mild. These side effects included gastrointestinal complaints (vomiting, nausea, abdominal cramps or diarrhea) as well as a few cases of alopecia. Inhibition of the secondary phase of platelet aggregation has been described but its significance is not known. These adverse reactions as a result of the drug were infrequent and rarely necessitated its discontinuation.[1,2]

However, over the past three years more serious adverse effects have been reported with valproic acid. These included several cases of hepatic damage,[3,4,5] pancreatitis,[6,7] and thrombocytopenia.[8,9,10,11] Our patient represents one more case of the latter.

Thrombocytopenia associated with the use of valproic acid may be more common than is appreciated. Raworth, *et al*[10] found that five of 10 children on sodium valproate alone and three of 17 children taking sodium valproate and another anticonvulsant had platelet counts on at least one occasion of less than 110,000/mm.^{3} Seizure control was not affected in children on sodium valproate whose platelet counts were low. This group found no association between the use of doses greater than recommended (40 mg/kg) or duration of therapy and the platelet count.

In a later report from Sandlers, *et al*[11] an IgM antibody was found in a six-year-old child whose platelet count went as low as 24,000/mm.^{3} Halving the dose of valproic acid caused a rise in platelet count to 141,000/m.^{3} This group postulated that excess drug combines with a macromolecule to produce a hapten. The antibody which resulted, was directed against platelets because of their membrane fatty acids, which are chemically and configuratively similar to those of valproic acid.

The association of thrombocytopenia and sodium valproate therapy was investigated in a controlled manner by Neophytides, *et al.*[9] Ten out of 30 adult patients developed thrombocytopenia when treated with valproic acid. Other known causes of thrombocytopenia were ruled out. A greater fall in platelet count occurred in those patients receiving larger doses of valproic acid, 2100 to 3000 mg/day, as compared to the group receiving 1200 to 1700 mg/day. Bone marrow examinations in four patients with thrombocytopenia showed normal or slightly increased megakaryocytes. The platelet count returned to normal within four to 12 days after discontinuation of the drug.

Our patient exhibited findings in agreement with these previous reports. His dosage was excessive at 143 mg/kg and a weakly positive antibody was detected in his serum. Bone marrow examination showed decreased megakaryocytes (different from the study by Neophytides)[9] with all other cell lines

being normal. Platelet counts increased rapidly after discontinuation of the drug. No other cause of thrombocytopenia was found.

We emphasize the need for monitoring platelet count and function during treatment with valproic acid. This appears to be especially critical when using high doses of valproic acid. It would also seem advisable to check the platelet count before surgery on any child on long term anticonvulsant therapy. Extreme thrombocytopenia may necessitate discontinuation of the drug.

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Management of Graves' Disease

JEFFREY J. BUTLER, M.D. AND MADHIRA D. RAM, M.D., Ph.D.

GRAVES' disease or primary hyperthyroidism is still the most frequent cause of thyrotoxicosis. At present, the disease is thought to be due to a defect in immune surveillance, which allows a thyroid-directed lymphocyte to produce an antibody that is capable of reacting with the TSH receptor on thyroid cells and stimulate the production of thyroid hormone or due to an intrinsic thyroid disease resulting in a secondary immune response.[1]

It is not yet medically practical to treat this autoimmune disorder through modification of the immune system, and therapy is aimed at controlling the excess production of thyroid hormone, or by blocking its effects.

This is a review of the three currently available methods of treatment: 1) Radioactive iodine therapy, 2) medical management, and 3) surgical treatment. The availability of these three modalities has produced a lively controversy concerning the proper management of these patients. Surgery and radio iodine ablate the gland, while medical treatment suppresses hormone production until nature remission occurs. An attempt will be made to determine the preferable mode of therapy for specific subgroups of patients: a) children and adolescents, b) young adults, c) pregnant women, and d) adults over age 40.

Radioactive Iodine (RAI)

Since the first published reports of radioactive iodine treatment for Graves' disease in 1942, the method has proven to be effective in treating the disease. The treatment is simple, in as much as the patient swallows a small amount of the agent which is colorless and tasteless. If the response to the treatment is inadequate, a second or even a third dose can be administered at subsequent intevals.

There have been no immediate complications from the procedure itself. The major disadvantage has been a high rate of hypothyroidism in subsequent years. Nofol in 1966 reported an estimated 70% rate of hypothyroidism 10 years after I^{131} therapy.[2] There is nearly a 40% incidence of hypothyroidism in the first year, and a 2.8% increase each successive year.

In an attempt to lower this high rate of hypothyroidism, low dose I^{131} treatment and the use of I^{125} have been introduced. In a retrospective study, Glennon found that in a group of patients receiving low dose I^{131}, (3mCi or less) the incidence of hypothyroidism was less than with usual doses at one year, and there was a delay in the appearance of hypothyroidism.[3]

He concluded however that there is no decrease in the annual rate of occurrence of hypothyroidism, and there may be no net effect on the ultimate development of hypothyroidism. The incidence of hypothyroidism with I^{125} treatment is similar to that with I^{131}. Consequently I^{125} has not offered an advantage over I^{131} and has been discontinued.[4,5]

The high rate of hypothyroidism may in part be due to treating patients with self limiting disease. Beierwaltes recommended a 24 hour I^{131} uptake study prior to RAI treatment to exclude patients who have self limiting thyrotoxicosis (subacute thyroiditis or post partum thyrotoxicosis) from therapy.[5]

Two other areas of concern regarding RAI treatment have been the purported incidence of increased symptomology following RAI treatment and the delay of two or three weeks to achieve therapeutic results. Tamagna has shown that RAI treatment caused no significant increase of serum T_3 and T_4 concentration in the majority of his patients.[6] He did report several patients with worsening symptoms, but they were all well controlled by propranolol. Propranolol has also been shown to prevent "thyroid crisis" in patients receiving RAI treatment who take several weeks to become euthyroid.[7]

The concerns regarding an increased incidence of leukemia and of thyroid cancer following RAI therapy have decreased in the past few years.

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Beierwaltes discussing the Cooperative Thyrotoxicosis Therapy Follow-up Study observed that although patients with Graves' disease have a 50% greater incidence of leukemia than the public in general, there is no evidence that RAI treatment for hyperthyroidism causes an increase in the incidence of leukemia.[5] The incidence of thyroid cancer in patients following RAI treatment is 0.1%. This compares to a 0.5% incidence in surgically treated patients and a 0.3% incidence in patients treated with antithyroid drugs. This lower incidence following RAI therapy may be due to the thyroid cells inability to replicate after radiation treatment. Beierwaltes also observed that the usual dose of RAI provides a larger number of rads than those received from external radiation which was earlier implicated for an increased incidence of thyroid cancer.

The incidence of potential changes in the genetic pool has not materialized in studies to date, but an increase of 0.025% in incidence of birth defects has been predicted following RAI therapy.[4]

Surgical Treatment

Subtotal thyroidectomy is the operation performed usually and offers a rapid cure of thyrotoxicosis in Graves' disease. As surgical treatment has improved, and pretreatment with antithyroid drugs, propranolol and iodine have become common practice, the incidence of post-operative complications has decreased. Iodide decreases the release of thyroid hormone and the biosynthesis of thyroxine. In so doing it reduces the vascularity of the thyroid gland and produces a temporary involution of the gland.[1] The treatment with antithyroid medications has effectively converted patients to an euthyroid state, further decreasing morbidity.[1,4] Propranolol relieves thyrotoxic symptoms with a maximal clinical response of 48-72 hours, and has proven to be an alternate and effective drug for preoperative management.[11]

Total thyroidectomy rather than subtotal thyroidectomy has been proposed in the treatment of thyrotoxicosis.[8] The results show similar operative morbidity rates for both procedures but a decreased recurrence of thyrotoxicosis, and a greater incidence of hypothyroidism in those subjected to total thyroidectomy.

The mortality rate for subtotal thyroidectomy has become negligible, but post-operative morbidity is still present.[1,4,7] Post operative hypothyroidism occurs in 3.6-50.0% of surgically treated patients.[1,2,4,7] Hypoparathyroidism develops in varying degrees of severity in 1-10% of operated patients.[1,4,7] Damage to the recurrent laryngeal nerve resulting in transient to permanent vocal chord palsy occurs in 0-5.6% of patients.[1,4,7] Finally, the recurrence or persistence of hyperthyroidism is noted in 0.6-17.9% of patients.[1,7]

Surgery is clearly indicated for large goiters that are cosmetically unappealing, or that cause compression of surrounding structures, especially the trachea. Surgery rapidly relieves these compression symptoms. RAI rarely, if ever, relieves tracheal deviation and compression from a large multinodular goiter.[5]

Medical Management

Medical management of Graves' disease is achieved by propylthiouracil (100-600 mg daily) or methimazole (10-60 mg daily) in three divided doses. These drugs both act by inhibiting the peroxidase-enzyme system and propylthiouracil additionally inhibits coupling of iodotyrosines and also inhibits the formation of T_3 from T_4 at peripheral sites.[1]

Studies have shown varying rates of remission ranging from 11.4% to 85% (9,10). It is speculated that low remission rates may be due to increased dietary iodine but no conclusive evidence has been reported. Proponents of medical management of Graves' disease point out that it is a self limiting disease, and that permanent ablation of the thyroid gland is not necessary.[10].

The incidence of side effects of the drug has a similar range in most studies.[1,10,11,7] Hypothyroidism occurs in 2-3%; mild reactions including jaundice, fever, malaise, arthralgia, pruritus and skin rash occur in 3-6% of patients, and agranulocytosis has been reported in 0.5-0.7% of patients. These side effects are all short lived and reversible once the medication is stopped. *

One drawback to medical management is that patients must administer the drug three times a day. In an attempt to improve compliance, single daily dosage of patients has been advocated.[12] Of

***Agranulocytosis may result in death due to sepsis and is not always a benign side effect.—ED.**

those patients who were euthyroid on thrice daily dosage, 70% remained euthyroid on single daily dosage.[12]

Recently propranolol has become popular in rapid preoperative preparation of patients for surgery, for rapid control of thyroid storm and for maintaining patients asymptomatically during early post surgical, RAI and antithyroid therapy. Propranolol is a β blocker and rapidly improves hyperthyroid symptoms without changing T_3 or T_4 serum levels.[7,13,14] Propranolol is not an effective long term treatment for thyrotoxicosis because it only masks symptoms and does not prevent over production of thyroid hormone. However, McLarty found that several patients became euthyroid while on propranolol treatment, but he attributes this to the natural history of the disease.[15]

Lithium and iodide are known to prevent thyroid hormone release, and have proven to be effective in treating the symptoms of thyrotoxicosis in patients awaiting surgery.[11] Lithium may be an adjunct to RAI treatment since it increases retention of I^{131} by the thyroid gland.[7]

Treatment of Children and Adolescents

Most physicians readily agree that the treatment of choice for children and adolescents is antithyroid medication. The side effects in children are similar to those mentioned before, and propylthiouracil and methimazole maintain most hyperthyroid children in a euthyroid state. Problems occur in up to 45% of children who are unable to tolerate their medication, fail to follow their medical regimen, have persistent disease, or relapse after initial remission.[5]

When any of the above mentioned problems occur, the decision between I^{131} and surgical therapy must be made.

Depending on the surgeon's technical ability, the incidence of side effects closely resembles those seen in adults undergoing thyroidectomy. The risks of hypothyroidism, recurrent laryngeal nerve injury, hypoparathyroidism and tetany are real.[16,5]

I^{131} treatment, although simple, should not be used in children. As mentioned previously there is the potential risk of altering the genetic pool. In view of the unknown long term effects of radiation it is undesirable to subject children to this risk. Surgical treatment is safe and effective.

Treatment of Young Adults

In young adults of childbearing age (20-40 years) the choice of treatment for Graves' disease is similar to that in children. Medical treatment is the initial treatment of choice, but if this fails, the argument remains the same—does I^{131} alter the gene pool? However in most series the incidence of surgical side effects is less in adults than in children, and because there is a genetic risk, the surgical treatment is to be preferred.

In one report two-thirds of the patients preferred surgery over RAI, after they were counselled about the choices.[19]

Treatment of Pregnant Women

Pregnant women are best treated with antithyroid medications.[7,20] To date all infants of treated mothers have been normal both mentally and physically. Antithyroid drugs are known to cross the placenta, and hence it is important to use the minimum therapeutical dose, to prevent fetal hypothyroidism. Herbst had success treating pregnant women with both antithyroid medication and thyroid therapy. He reported that 29 of 32 pregnancies resulted in healthy infants, while there were three fetal deaths.[21]

Surgery carries an increased incidence of spontaneous abortion in the first trimester, but is an effective alternative to medical treatment in the second and third trimesters. In the preoperative preparation of pregnant patients, propranolol is not recommended since it decreases uterine blood flow.

RAI therapy is not recommended in pregnancy because of the possible adverse effects on the fetus. It has been reported that several women inadvertently received I^{131} during the first 12 weeks of pregnancy without side effects.[1]

Treatment of Adults

For adults over age 40, or those who no longer plan future childbearing, RAI is the treatment of choice, with the only side effect being hypothyroidism.

Conclusion

Presently Radio Active Iodine, Surgical Resection and Medical Management are all effective treatments in the management of thyrotoxicosis

in Graves' disease. The choice of treatment should be individualized in each case, achieving a suitable therapy and outcome for each patient.

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President's Page—cont.

more than the political/legislative arena. And yet far too many physicians fail to appreciate the vast legislative efforts on the part of organized medicine. Physicians emphasize the importance of "representation" in Washington, but some are not willing (we **know** they are able) to pay their fair share toward their representation through membership dues.

While we were all very interested in the Presidential Election in November 1980, I must confess my greatest pleasure came in watching the election returns for the United States Senate and seeing liberal Senators (regardless of party) "knocked off" one by one, knowing full well that AMPAC had the maximum contribution riding with the victor! It made me feel good to know that I had helped, in a small way, to accomplish those victories by having paid my KEMPAC/AMPAC dues. Every KEMPAC/AMPAC member should have felt the same way.

You could fill this entire Journal with reasons to belong to KMA/AMA and KEMPAC/AMPAC. I want to pay my fair share—I want to win—for my country, our profession and for our patients. I belong—do you?

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INDICATIONS:

Although the principal indication for cloxacillin sodium is in the treatment of infections due to penicillinase-producing staphylococci, it may be used to initiate therapy in such patients in whom a staphylococcal infection is suspected. (See Important Note below.)

Bacteriologic studies to determine the causative organisms and their sensitivity to cloxacillin sodium should be performed.

IMPORTANT NOTE

When it is judged necessary that treatment be initiated before definitive culture and sensitivity results are known, the choice of cloxacillin sodium should take into consideration the fact that it has been shown to be effective only in the treatment of infections caused by pneumococci, Group A beta-hemolytic streptococci, and penicillin G-resistant and penicillin G-sensitive staphylococci. If the bacteriology report later indicates the infection is due to an organism other than a penicillin G-resistant staphylococcus sensitive to cloxacillin sodium, the physician is advised to continue therapy with a drug other than cloxacillin sodium or any other penicillinase-resistant semi-synthetic penicillin.

Recent studies have reported that the percentage of staphylococcal isolates resistant to penicillin G outside the hospital is increasing, approximating the high percentage of resistant staphylococcal isolates found in the hospital. For this reason, it is recommended that a penicillinase-resistant penicillin be used as initial therapy for any suspected staphylococcal infection until culture and sensitivity results are known.

Cloxacillin sodium is a compound that acts through a mechanism similar to that of methicillin against penicillin G-resistant staphylococci. Strains of staphylococci resistant to methicillin have existed in nature and it is known that the number of these strains reported has been increasing. Such strains of staphylococci have been capable of producing serious disease, in some instances resulting in fatality. Because of this, there is concern that widespread use of the penicillinase-resistant penicillins may result in the appearance of an increasing number of staphylococcal strains which are resistant to these penicillins.

Methicillin-resistant strains are almost always resistant to all other penicillinase-resistant penicillins (cross-resistance with cephalosporin derivatives also occurs frequently). Resistance to any penicillinase-resistant penicillin should be interpreted as evidence of clinical resistance to all, in spite of the fact that minor variations in *in vitro* sensitivity may be encountered when more than one penicillinase-resistant penicillin is tested against the same strain of staphylococcus.

CONTRAINDICATIONS:

A history of a previous hypersensitivity reaction to any of the penicillins is a contraindication.

RESULTS OF ORAL THERAPY revealed a high percentage of treatment failures with penicillin V potassium, but *no* failures with Tegopen.

		Given Tegopen® *(cloxacillin sodium)*	Given *penicillin V-K*
Staphylococcus aureus	(78 patients)	39	39
Returned to clinic at one week		29†	38†
Treatment failure at one week		0	18 (47.4%)
Staphylococcus aureus* and *Streptococcus pyogenes	(9 patients)	4	5
Returned to clinic at one week		4	5
Treatment failure at one week		0	2 (40%)
No initial bacterial growth	(14 patients)	9	5
All 14 healed, regardless of which antibiotic was administered.			
Beta-hemolytic *Streptococcus*	(1 patient)	0	1
TOTALS:	**102 patients**	**52 patients**	**50 patients**

†Eleven patients did not return for their one-week checkup. These were all called by telephone, and their families reported the lesions had healed. One patient was dropped from the study, early, because of adverse reaction to medication.

STUDY: DESCRIPTION/PROTOCOL

- 102 nonselected subjects, with initial bacteriology as follows: 77% *Staphylococcus aureus*, 9% mixed *Staphylococcus aureus* and *Streptococcus pyogenes*, and 1% beta-hemolytic *Streptococcus*.‡
- All patients were given randomized therapy—Tegopen capsules or oral solution, or penicillin V-K tablets or oral solution, in recommended dosages according to body weight.
- All patients were evaluated after one week's therapy. If there was no improvement, therapy was switched to the other antibiotic. The "other antibiotic" proved to be Tegopen 100% of the time because no treatment failures had occurred with Tegopen.
- A final assessment of progress was made two weeks after initiation of Tegopen therapy.

‡The remainder, to equal 100%, consisted of 14 patients (13%) who exhibited no initial bacterial growth. These 14 were all healed, whether given Tegopen or penicillin V-K.

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WARNING:
Serious and occasionally fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin therapy. Although anaphylaxis is more frequent following parenteral therapy it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with a history of sensitivity to multiple allergens.

There have been well documented reports of individuals with a history of penicillin hypersensitivity reactions who have experienced severe hypersensitivity reactions when treated with a cephalosporin. Before therapy with a penicillin, careful inquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins, and other allergens. If an allergic reaction occurs, the drug should be discontinued and the patient treated with the usual agents, e.g., pressor amines, antihistamines, and corticosteroids.

Safety for use in pregnancy has not been established.

PRECAUTIONS:
The possibility of the occurrence of superinfections with mycotic organisms or other pathogens should be kept in mind when using this compound, as with other antibiotics. If superinfection occurs during therapy, appropriate measures should be taken.

As with any potent drug, periodic assessment of organ system function, including renal, hepatic, and hematopoietic, should be made during long-term therapy.

ADVERSE REACTIONS:
Gastrointestinal disturbances, such as nausea, epigastric discomfort, flatulence, and loose stools, have been noted by some patients. Mildly elevated SGOT levels (less than 100 units) have been reported in a few patients for whom pretherapeutic determinations were not made. Skin rashes and allergic symptoms, including wheezing and sneezing, have occasionally been encountered. Eosinophilia, with or without overt allergic manifestations, has been noted in some patients during therapy

USUAL DOSAGE:
Adults: 250 mg. q.6h.

Children: 50 mg./Kg./day in equally divided doses q.6h. Children weighing more than 20 Kg. should be given the adult dose. Administer on empty stomach for maximum absorption.

N.B.: INFECTIONS CAUSED BY GROUP A BETA-HEMOLYTIC STREPTOCOCCI SHOULD BE TREATED FOR AT LEAST 10 DAYS TO HELP PREVENT THE OCCURRENCE OF ACUTE RHEUMATIC FEVER OR ACUTE GLOMERULONEPHRITIS.

SUPPLIED:
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Oral Solution—125 mg./5 ml. in 100 ml. and 200 ml. bottles.

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EDITORIAL

Burnish Our Escutcheon

IT isn't fair to write of only local or even county medical problems in a journal that has state-wide distribution. Perhaps every county in our state has the same problem to which I speak, so this editorial won't be too secular.

The problem: Medical care of the indigent. My solution: Aid from the private sector. Before you call me a turncoat and accuse me of strange political bedfellows, let me tell you how I got here, because my conservative philosophy is more strong then even after 13 months of the new turn of the Reagan administration to "voluntarism."

S. Pett of the Associated Press wrote an intriguing account of his interview with Ronald Reagan that appeared in the October 18, 1981, Sunday Courier-Journal. In the article, President Reagan quotes Gary Cooper in the movie, "Mr. Deeds Goes To Town."

Cooper describes a steep hill in front of his home and of the cars that try to climb that hill. Some of the cars make it "lickety-split" up the hill in high while others sputter and shake and slip back to the bottom. Cooper says finally, ". . and I say that the fellow who can make it in high should stop once in a while and help those who can't."

If this analogy fits anybody, it fits physicians best of all. The private sector of medicine represents those who have made it and now with very little effort can reach back and help the less fortunate. Lest we forget that in our formative years and in resident training, the bulk of our learning and experience came from the poor and indigent. We have been to the well many times; can we now put something back?

We are aware of the financial problems of University Hospital in Louisville and of other hospitals throughout the state. We know of the retrenchment of Medicare and Medicaid funds. So the need of help from the private sector is apparent. The question is how can this be implemented?

Physicians I have talked to about their involvement in this cause have been unanimously receptive although cautious in just how it should be done logistically. All agree that the private office is not the place for indigent care, in that word from patient to patient could swamp that office. Most agree the HMO's are not the place to volunteer aid in that HMO's represent an expensive experiment of government intervention to foster the myth of preventive medicine as the way to reduce costs.

One physican asked a most important question, "What do we do with the really sick ones?" Others wonder about the legal implications of the signed prescription. Does that constitute a contract of establishing the patient-physican bond? Other minor problems immediately come to mind. How do we obtain or finance needed laboratory tests, x-rays or electrocardiograms on the people we see whose history suggests the need for such tests? Before I ask more questions than I answer, let me get to my solution.

1. I propose that every private physican donate four hours per month in the out-patient care of the indigent and elderly.
2. This service be rendered in a neighborhood setting such as a library, office building, gymnasium, etc, as opposed to a hospital or medical clinic.
3. Volunteer aid be sought from physician's wives, social welfare agencies, The Junior League, etc, to aid in the screening of patients and record keeping.
4. Drug samples be obtained from physicians' offices, pharmacies, and drug companies for their appropriate use as indicated.
5. The medical service be rendered in the early evening hours, *ie* between 6:00 pm and 10:00 pm so that the working person will not lose a portion of his daily wages while seeking help.
6. The plans be coordinated through the county medical societies to insure the smooth function of this project.

The above are suggestions to serve for a template of action and can be altered or added to as needed.

This editorial is written in the hope of galvanizing the medical profession to action. The many faces of medicine are rapidly changing particularly in the area of funds available from all levels of government. Personally, I applaud the new Federalism concept and I feel I must make a contribution to help it work.

If doctors are truly the Young Princes then we must have the *noblesse oblige* attitude toward those who are less fortunate. What a stunning way to burnish our escutcheon.

Milton F. Miller, M.D.

PROFILE

Eugene H. Conner, M.D.

KMA Historian

Text and Photographs by Donna M. Young



THE KMA Annual Meeting program booklet features a biographical sketch on a past president of KMA each year. The author of these condensed history lessons is Eugene Conner, M.D., KMA Historian. He has been writing biographies for KMA since 1964.

Doctor Conner's interest in history, however, began about 35 years ago. "I was always interested in the history of science. Medicine sort of overlaps since many of the early scientists were also physicians," he explains.

When Doctor Conner begins researching some facet of medical history, his first step is to look through what he describes as his own "modest library." "It's not very extensive. Information on history is not found in one place. I get it out of newspapers, letters and diaries."

Doctor Conner spends much time in libraries sorting through those letters and diaries. About twice a year he travels to Philadelphia to spend time in two libraries with a history of their own. The Library of the American Philosophical Society for the Promotion of Useful Knowledge and the Library Company of Philadelphia were



both established in the 1700's by Benjamin Franklin. Doctor Conner points out that these libraries are open to the public and the people working there are very helpful to researchers. Both libraries have large collections of manuscripts and published material on science and medicine in America.

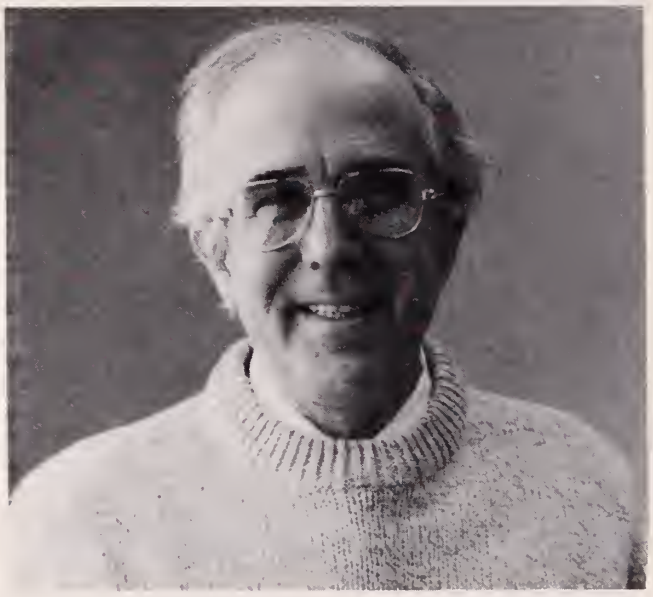
Doctor Conner often needs no research concerning Kentucky physicians. "I know some information on past Kentucky physicians, particularly those physicians from around Louisville and Lexington, because of the information contained in the medical school libraries. In obscure geographic locations of Kentucky where there are no newspapers, and practically no records except family letters, it is more difficult to learn anything. It is a very interesting thing though, that even when there was a newspaper a physician was rarely ever accorded an obituary."

Doctor Conner graduated from the University of Maryland School of Medicine in 1945. He came to Louisville as Professor and Chairman of Anesthesiology at U of L in 1957 where he remained until 1971. He now has a private practice of anesthesiology.

The 14 years of teaching are evident when Doctor Conner expounds on notable events in medical history. His explanations are detailed as if he were lecturing to a class of medical students. "I think the early triumphs in medicine had to do with the application of science and observation to the control of disease. A striking example is innoculation for smallpox in the mid-18th century, supplanted by the safer vaccination by the beginning of the 19th century. Also, the use of specific botannical preparations to treat specific disorders, for example digitalis in the treatment of the failing heart, were significant discoveries. Perhaps the greatest contribution to medicine occurred in 1846. This was the discovery of anesthesia which ultimately changed surgical practice."

Many problems that physicians encountered in the past are still evident today. Particularly, according to Doctor Conner, the public's attitude toward their own health and their relationship with physicians. "A hundred years ago, when people became ill, there were certain things they did to try to correct the situation as well as they knew how. They did not call the doctor until the condition was beyond their means of treatment. People still have the tendency to treat themselves, often by taking medicine prescribed for others. Often people's minds are so preoccupied that they may not listen to what physicians suggest. Yet, they think that physicians are magicians and regardless of what's wrong or how it plagues them, the physician should be able to cure them immediately—and this has always been so. The doctor is portrayed as a super-healer and people are disappointed when they find out differently."

Politics has also played an important role in the history of medicine according to Doctor Conner. "Physicians have always been politically active. They receive an education and are articulate beyond the ordinary citizen although training in medicine does not necessarily transfer to the political arena. Physicians represent a very small population and possibly they do not exert the influence that they exerted even as individuals two centuries ago. Benjamin Rush was an active physician and medical teacher, patriot and one of the five physician signers of the Decla-



ration of Independence." That's not to say that all physicians were as successful in their political endeavors. Thomas Cooper, M.D., physician, chemist and administrator was tried for sedition after he became President of the College of South Carolina in the 1830's.

Organized medicine in the 18th century consisted of the student/faculty medical society whose primary purpose was to discuss diagnosis and treatment of disease. The early medical societies in colonial America were organized as an effort to give recognition to those "respectable" physicians who received acceptable apprenticeship or university class attendance. It was not until the 1890's that it became necessary to have a medical diploma to practice medicine although legislative effort to enforce this began in the 1850's.

It may not be surprising to know that Doctor Conner's idol is Ephraim McDowell, M.D., a feeling he shares with many others. "He carefully prepared himself through education, training and practical skills. It is very important and significant that he didn't belong to a medical faculty. He functioned alone with no impediment and yet with no support. Today, we have restraints, good and bad. McDowell couldn't do what he did in the past, today. He was an independent Scotsman." relates Doctor Conner.

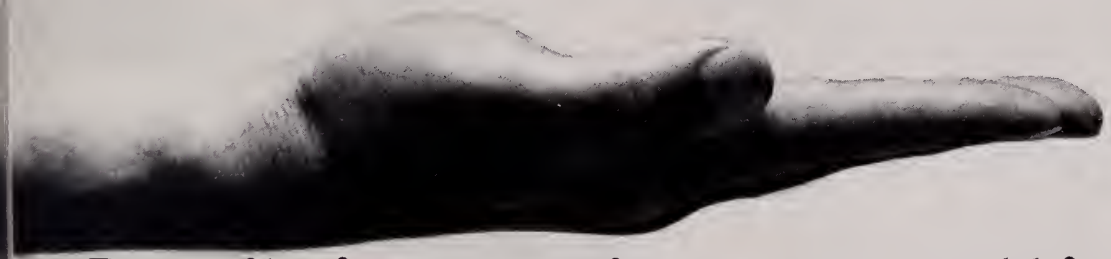
Besides history as a hobby, Doctor Conner enjoys woodworking, gardening and hunting waterfowl in Maryland and Texas. His wife, Mary Lou, shares Doctor Conner's interest in history. She works many times as his "proofreader and English professor." They met in Maryland where Mrs. Conner was a nurse. The Conners have four children. The oldest daughter, Janice Ryan, lives in Texas and is married to a surgical resident. Jeffrey, their son, lives in Pearl Harbor and is married to a Navy lieutenant. Marcia is a nurse and delivery room supervisor at Methodist Hospital and Melissa, their youngest, is a recent graduate in pharmacy from Auburn College in Alabama.

Doctor Conner thinks physicians could learn a lesson from the past. "I think the best rewards of medical practice have always been and will remain the personal contact with patients and the friendships established. I think this will remain unchanged. Maybe specialization has eroded some of the physician/patient relationship and we should concentrate on reestablishing this."

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J-9043-4 July 1981



GRAND ROUNDS

Limitation of Infarct Size

Like one that on a lonesome road
Doth walk in fear and dread,
And having once turned round walks on
And turns no more his head,
Because he knows that close behind
A frightful fiend doth tread.

Samuel T. Coleridge (Rime of the Ancient Mariner)

CHRISTOPHER J. HAVELDA, M.D.

To date sufficient animal data exists to support the concept that the extent of myocardial necrosis following coronary occlusion can be altered by a large number of interventions. The time frame within which these interventions will be effective is short and probably reflects the rapidity with which irreversible cellular injury occurs in the presence of ischemia. Although the accurate *in vivo* measurement of the extent of ischemia and infarction has proved difficult, enzymatic and electrocardiographic techniques have proved superior to other methods. The clinical applicability of various interventions to limit infarct size is controversial. A wide variety of interventions are currently under active investigation. The use of intracoronary streptokinase, emergency coronary revascularization, intra aortic balloon counterpulsation, intravenous nitroglycerin, hyaluronidase, glucose-insulin-potassium infusion, beta blockade, calcium antagonists and nonsteroid anti-inflammatory agents, all hold promise and may alter the future approach to the management of acute myocardial infarction. The defined role of these agents in the treatment of acute myocardial infarction awaits further clinical trial.

Earlier this century James Herrick identified the frightful fiend of coronary artery occlusion that now stalks our Western civilization. Subsequently, the classical treatment of acute myocardial infarction (AMI) was directed toward the treatment of its complications, namely myocardial pump failure and arrhythmias. Acute myocardial infarction was felt to be an irreversible spontaneous event and muscle death subsequent to coronary occlusion was unpreventable. More recently a newer concept has emerged. If the development of myocardial necrosis following coronary occlusion can be altered while still in a reversible phase, then early intervention might salvage ischemic myocardium and hence limit the extent of subsequent necrosis. Since recovery and morbidity are dependent on the amount of surviving myocardium, then interventions limiting infarct size should have major beneficial effects on patient survival. With regard to these concepts, this re-

From the Division of Cardiology, Department of Medicine, University of Louisville, School of Medicine, Louisville, Kentucky, and the Veterans Administration Medical Center, Louisville, Kentucky. Supported in part by NHLBI Grants HL-19768 and HL-16901, a grant from the Louisville and Jefferson County and Kentucky Heart Associations and an award from the Veterans Administration. Correspondence: Christopher J. Havelda, M.D., Division of Cardiology, Veterans Administration Medical Center, Building 19, 800 Zorn Avenue, Louisville, Kentucky 40202

view addresses the following key questions:

a. What is the pathologic time frame of AMI?
b. Can infarct size be limited after coronary artery occlusion?
c. Can infarct size be measured in vivo?
d. Is infarct size limitation currently clinically applicable?

As the discussion proceeds it will be noted that the answers to these questions will become increasingly difficult to define.

What is the pathologic time frame of acute myocardial infarction

The myocardial cell is completely dependent on its mitochondria for energy requirements, and hence mitochondrial abnormalities appear early in the course of ischemia. Following 15 minutes of coronary occlusion, slight mitochondria swelling and glycogen depletion occurs. If flow is re-established then these changes are reversible and cells resume normal function. If ischemia continues, further glycogen depletion and margination of the nuclear chromatin are seen. If ischemia persists for 40-60 minutes small dense mitochondrial deposits of calcium phosphate appear and their cristae become swollen and separated. The appearance of these deposits signifies loss of mitochondrial function and irreversible cellular injury. If flow is now re-established the development of these granules is accelerated. Thus, in the animal model at least, irreversible cellular injury occurs very early in the time course of ischemia.

To be clinically beneficial the prevention of irreversible myocardial injury demands the salvage of significant amounts of ischemic tissue that can be returned to normal function. Considerable controversy exists over the existence of such a "border" zone of intermediate injury that interfaces between normal and ischemic tissue.[1] The weight of current experimental evidence in animal models has failed to support the presence of a border zone, and the transition from normal to ischemic tissue is suggested to occur over as little a distance as 2 mm. However, such evidence fails to take into account the temporal nature of tissue injury. The wavefront of ischemia migrates (particularly transmurally) over time, and although a sharp interface between normal and ischemic tissue may be present, this temporal spread of ischemia may be amenable to modification.[1] Further, arguments deduced from animal models may not apply strictly to the human where chronic ischemia, multi-vessel disease, and collateral circulation may alter the pathologic course of muscle necrosis.

Can infarct size be limited after coronary occlusion?

Maroko *et al*[2] used epicardial electrograms in an open-chested dog model to measure the extent of ischemia 15 minutes after temporary coronary occlusion. Following release of the occlusion and resolution of ischemia, reocclusion was applied and an intervention given. By comparing the degree of ST segment elevation before and after the intervention, the beneficial or harmful effects of the intervention on the ischemic myocardium could be demonstrated. Using this model these investigators were able to show that a large number of interventions would alter the course of subsequent ischemia following coronary occlusion. Interventions that increased myocardial oxygen requirements (isoproterenol, glucagon, ouabain, bretylium, tachycardia) and those decreasing myocardial oxygen and nutrient supply (hypoxia, anemia, hypoglycemia) all increased myocardial damage. We have recently shown that nicotine administered to dogs at the time of AMI also produces larger infarcts.

In contrast to these agents, were those that reduced ischemic injury. Agents that decreased myocardial oxygen demands (βblockade, digitalis in the failing heart, balloon counterpulsation, afterload reduction, inhibition of lipolysis with carnitine), increased oxygen delivery (coronary reperfusion, increased pO_2, methoxamine, balloon counterpulsation, nitroglycerin, mannitol, hypertonic glucose), augmented anaerobic metabolism (glucose-insulin-potassium) all proved beneficial. Other agents that presumably enhanced transport into the ischemic zone (hyaluronidase) or protect against autolytic and heterolytic processes (hydrocortisone, cobra venom factor, aprotinin) also reduced ischemia.

Since few patients are seen in the very early phase of AMI such experimental data, although impressive, has little clinical significance unless a beneficial effect can be demonstrated even if the intervention is delayed. Subsequent work by these

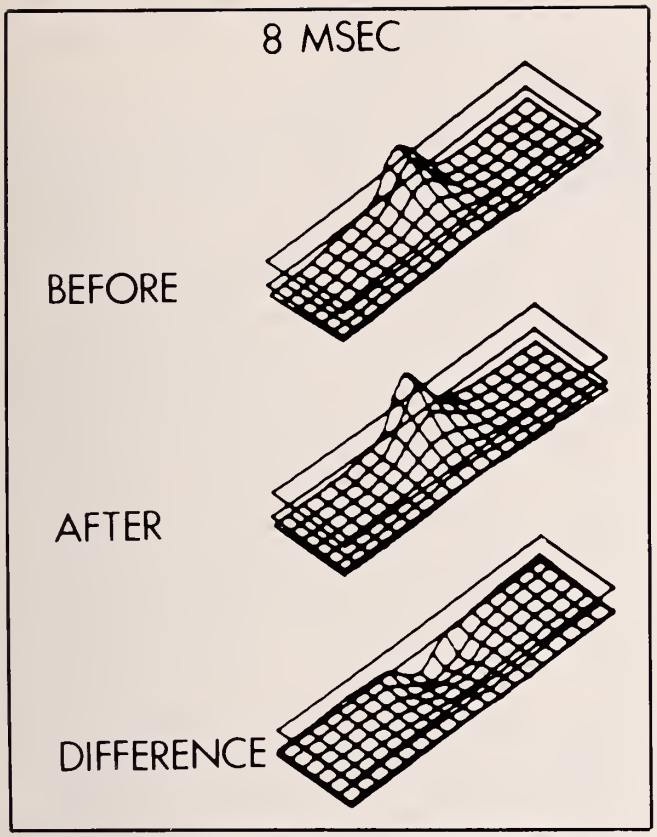


Figure: 142 lead body surface maps taken before and after anterior wall infarction in a dog. Each intersection represents a lead site on the torso. Maps are arranged such that upward deflections represent net positivity. By subtracting the after infarction map from the before infarction map a difference map is obtained. Note the negative sink seen in the difference map is an estimate of the 'electrical volume' lost by infarction. This electrical volume closely approximates the pathologic volume of infarction.

researchers demonstrated myocardial salvage even up to three hours following coronary occlusion with a number of these agents. Between three and six hours the effect of the intervention was diminished and by six hours the effect was lost.

Thus, infarct size can be altered during the course of its evolution, even if the intervention is delayed. The large number of interventions demonstrated to limit infarct size in laboratory animals formed the basis for the many subsequent clinical trials.

Can infarct size be measured *in vivo?*

Inherent in any technique to limit infarct size is the requirement for an accurate method of infarct size measurement *in vivo*. No ideal method for the *in vivo* measurement of infarct size currently exists although enzymatic, noninvasive imaging, and electrocardiographic techniques have been widely used.

Serial assays of creatine kinase (CK) or its heart specific isoenzyme (CK-MB) during the evolution of acute myocardial infarction have been used to generate enzyme release curves that correlate well with the actual extent of tissue necrosis.[3] The mathematical model used to predict the gram-equivalent amount of tissue undergoing homogeneous necrosis that produces such curves is based on the rate of CK release into the circulation, its volume distribution, and its clearance rate. Although an accurate measure of infarct size in animals, this method has a number of limitations. CK enzyme curves tend to overestimate the size of patchy versus homogeneous infarcts and may not be applicable to inferior infarcts.[4,5] CK appearance is influenced by alterations in lymphatic flow, and by intramuscular injections, while CK clearance rates may be influenced by drugs such as anesthetic agents, sedatives and propranolol.

Noninvasive imaging by radionuclide and echocardiographic techniques includes the use of infarct avid agents (Technetium-99m stannous pyrophosphate), perfusion scanning (Thallium-201), metabolic imaging (^{14}C-labelled fatty acids), radionuclide angiography, computerized tomography and two-dimensional echocardiography. These approaches to infarct sizing remain largely experimental and qualitative, and are subject to a number of limitations.[6]

Electrocardiographic techniques hold much promise for the future. Earlier methods using ST segment mapping, QRS mapping and vectorcardiographic approaches, have correlated well with the size of anatomic infarction. However ECG mapping (ST segment and QRS) is felt to be applicable only to patients with transmural and lateral infarctions. Further, such measurements are influenced by the presence of intraventricular conduction disturbances, pericarditis and serum electrolyte abnormalities. Newer approaches incorporate surface ECG recording from up to 142 sites on the body surface. Each site is analyzed at each consecutive msec throughout the cardiac cycle and computer generated body surface maps can be drawn using isopotential geographic or grid display formats (Figure). A measure of the "electrical volume" of infarction can be estimated by

subtracting maps generated before and after infarction.[7] We have demonstrated a close correlation between the electrical volume of infarction in dogs undergoing closed-chested anterior wall infarcts (r=0.88). Further, reduction of the lead set to a more manageable 35 leads is accompanied by little information loss and may render this technique a clinically applicable bedside tool for the future.

Is limitation of infarct size currently clinically applicable?

A large number of interventions have demonstrated the abilities to limit infarct size. A few have undergone preliminary study in humans.[8-22] The following list is selective and draws attention to the most promising agents.

Thrombolytic therapy: The earliest class of agents to undergo clinical trial in acute myocardial infarction included the intravenous administration of streptokinase and urokinase.[8] Cooperative trials with these agents have dominated the field since the first report of successful reduction in mortality appeared in 1966. However, a number of these trials have been criticized because of flawed design, introduction of possible bias, and inconclusive results. The most recent trial demonstrated improved survival in "medium" risk patients following AMI, but again was criticized because rigid criteria precluded the entry of sufficient patients into high risk groups.[9]

More recently it has been demonostrated that an acutely occluded coronary artery may be recanalized following the intracoronary administration of streptokinase or urokinase.[10-12] Although it is clear that coronary thrombosis occurs within hours of onset of symptoms of AMI, it is still controversial whether this is a primary or secondary event. Nevertheless, Mathey et al[11] demonstrated the ability to rapidly recanalize an acutely occluded coronary artery in 30 of 41 patients presenting with symptoms of less than three hours duration. Three of these patients presented in cardiogenic shock and survived following reperfusion. Subsequent studies have indicated decreased Thallium-201 uptake in the involved region and thus suggested probable myocardial salvage.[12] This technique represents a major advance in the management of AMI and is currently under intensive investigation. Ideal patient selection, time constraints, appropriate pharmacologic treatment regimens during and after reperfusion are all yet to be defined.

Surgical Revascularization: Emergency coronary artery bypass graft (CABG) surgery for acute myocardial infarction has been highly controversial since initial reports noted up to a 20% perioperative mortality. Two recent reports, however, indicate that CABG following AMI has an attendant low mortality and improved survival.

Phillips et al[13] reported 75 patients operated at an average of 6½ hours after the onset of chest pain. Ejection fractions improved and left ventricular end diastolic pressures fell post-operatively suggesting improved left ventricular function. Their operative mortality was 1.3% with a late mortality of 2.8%. Dewood et al[14] reported a retrospective study of 387 patients (200 medically treated; 187 surgically treated). Patients operated upon early (less than six hrs of chest pain) had an in-hospital mortality of 2% (vs 11.5% treated medically) and a 6% mortality at 56 months (vs 20.5% treated medically). Such results should not be taken as unrestrained endorsement of emergency revascularization in AMI but suggest that in an exceptionally mobile community with a well organized cardiovascular team, the surgical mortality can be acceptably low. The final answer will await prospective trial.

Intraaortic Balloon Counterpulsation: Intraaortic balloon counterpulsation (IABC) has been widely used as a method of circulatory support in patients suffering cardiogenic shock. Its use in AMI has been limited. Leinbach et al[15] used IABC in young patients with uncomplicated anterior wall infarction. Their limited success appeared to be related to the presence of patency of the left anterior descending coronary artery since patients with total occlusion of this vessel showed no improvement. O'Rourke et al,[16] however found no benefit of IABC in patients with AMI and heart failure. The insertion of the intraaortic balloon is not without risk and complications such as lower limb ischemia are common. Thus, without clearcut beneficial effects the use of IABC in AMI has been limited to those patients with ongoing ischemia or those developing subsequent pump failure.

Nitroglycerin: Traditionally nitrates have been contraindicated in the setting of AMI because of the potential deleterious side effects of hypotension

and tachycardia. It has also been suggested that since the coronary resistance vessels may be maximally dilated in response to ischemia, a nonspecific coronary vasodilator dilating the nonischemic vascular bed would "steal" blood away from the ischemic area. Despite such theorectical limitations a few clinical studies have suggested myocardial salvage with nitroglycerin. Bussman et al[17] noted reduction of enzymatically determined infarct size following intravenous nitroglycerin, and doses of up to 50 μg/min were well tolerated. Beneficial effects were seen whether nitroglycerin was given early (less than eight hrs chest pain) or late (greater than eight hrs chest pain) in the course of infarction.

Although such reports are encouraging, the use of nitroglycerin to reduce infarct size is still considered experimental and can probably only be administered safely with concomitant hemodynamic monitoring.

Hyaluronidase: This enzyme is known to limit infarct size when administered to experimental animals up to six hours after coronary occlusion. The mechanism of action is unclear, but by depolymerizing mucopolysaccharides it may enhance nutrient transport into ischemic tissues. Its main advantage is the absence of harmful electrophysiologic and hemodynamic side effects. In a prospective randomized study of 91 patients given intravenous hyaluronidase within eight hours of the onset of symptoms, 35-lead electrocardiographic evidence of myocardial damage, sum of R wave voltage at initially ischemic sites and subsequent Q wave development, was more extensive in control patients.[18] Hyaluronidase is currently undergoing propective trial in the United States in the Multicenter Investigation of the Limitation of Infarct Size (MILIS) Study, and if the initial favorable experience with this agent is confirmed then it may become available for widespread use in patients with suspected AMI.

Glucose-Insulin-Potassium: In an attempt to pharmacologically alter the metabolic milieu of an acute myocardial infarction, glucose-insulin-and-potassium (GIK) solutions have been suggested to augment anaerobic metabolism and reduce the levels of potentially toxic circulating free fatty acids. In a randomized, controlled trial,[19] GIK treated patients received a solution of 300 g glucose, 80 mEq potassium chloride and 50 Units of regular insulin at infusion rates of 1.5 ml/kg/hr for 48 hours. The infusion into a central vein was well tolerated with no deleterious effect on left ventricular filling pressures or cardiac index. Free fatty acid levels fell following GIK and this was accompanied by a concomittant decrease in the frequency of premature ventricular contraction and the occurence of ventricular tachycardia. No effect on infarct size measured by CK enzyme release curves has been demonstrated. However, the number of patients currently randomized is few and a significant effect on infarct size therefore may be currently undetected.

Beta Blockade: Because of their well proven efficacy in the treatment of angina pectoris beta blocking drugs have received wide attention as potential infarct size limiting agents. Apart from the report of Snow,[20] most of the earlier clinical trials using propranolol demonstrated no effect on hospital mortality or incidence of arrhythmias following AMI. The doses of propranolol used in these studies, however was usually low (40-80 mg/day) and the drug was given comparatively late in the course of infarction. Recent randomized studies are more promising. Peter et al[21] gave propranolol 0.1 mg/kg intravenously followed by 320 mg orally over the next 27 hrs to patients with uncomplicated AMI. Those patients receiving the drug within four hrs of the onset of symptoms had significantly less evidence of muscle necrosis with lower peak serum CK levels, lower calculated CK release and less cumulative CK appearance in plasma. The salutatory effects of propranolol administration on myocardial ischemia include decreased myocardial oxygen consumption, decreased circulating free fatty acid concentrations, and preservation of mitochondrial morphology. The administration of propranolol (0.1 mg/kg of body weight) in the setting of AMI has been shown to be safe in selected patients in whom therapy is closely monitored.[22] Propranolol should not be administered to patients demonstrating second or third degree heart block or in patients with PR interval prolongation of greater than 0.24 seconds. Patients with clinical evidence of heart failure with rales occupying greater than one third of the lung fields or wheezing on auscultation, pulmonary artery wedge pressure of greater than 22 mm Hg

should not receive the drug. The presence of bradycardia (heart rate below 50 per minute) or hypotension (systolic blood pressure below 95 mm Hg) are also contraindications to propranolol use. In the absence of these contraindications propranolol is indicated in patients suffering AMI complicated by persistent refractory ischemic pain, tachyarrhythmias refractory to lidocaine and procainamide early after the onset of infarction, repetitive ST segment or enzyme elevation indicating infarct extension, hypertension which persist following adequate analgesia and sedation, and persistent sinus tachycardia in the presence of normal left ventricular filling pressures. The use of propranolol as an infarct limiting agent in AMI is also currently under clinical trial (MILIS Study). Until the results of such trials have better defined the role of beta adrenergic blockade in AMI, propranolol cannot be recommended as standard treatment in patients with uncomplicated AMI. In the chronic management of patients following AMI other beta blockers have demonstrated reduced mortality (practolol, timolol, antenolol) and decreased incidence of sudden death (alprenolol). Although given several days to weeks after infarction these agents may have improved survival by preventing or reducing the size of subsequent infarction.

Calcium Antagonist: A new class of agents that reduce cell membrane calcium flux are promising because of their potential to protect the ischemic myocardium by enhancing collateral blood flow to the ischemic zone, reversing coronary spasm associated with acute infarction, and reducing myocardial oxygen demand. Nifedipine has also been shown to have a protective effect in dogs undergoing cardiopulmonary bypass and may prevent calcium accumulation in ischemic cells.[23] Both verapamil and nifedipine have reduced infarct size in dogs following coronary occlusion. Clinical experience with these agents in AMI is limited but the need for more extensive evaluation of this exciting class of drugs is obvious.

Non-steroidal anti-inflammatory agents: Ibuprofen and flurbiprofen have decreased, indomethacin increased, and aspirin has had no effect on infarct size in experimental animals.[24] The true effects of these agents in humans suffering AMI awaits further study.

In summary, the physician caring for the patient following acute myocardial infarction has a large number of clinical tools available to him that might limit the extent of myocardial necrosis. A number of these interventions are currently under active investigation. The results of these trials are eagerly awaited and may alter the future management of acute myocardial infarction.

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Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae)*, *Haemophilus influenzae*, and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly)

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40)

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [100281R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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See important information on adjoining page.

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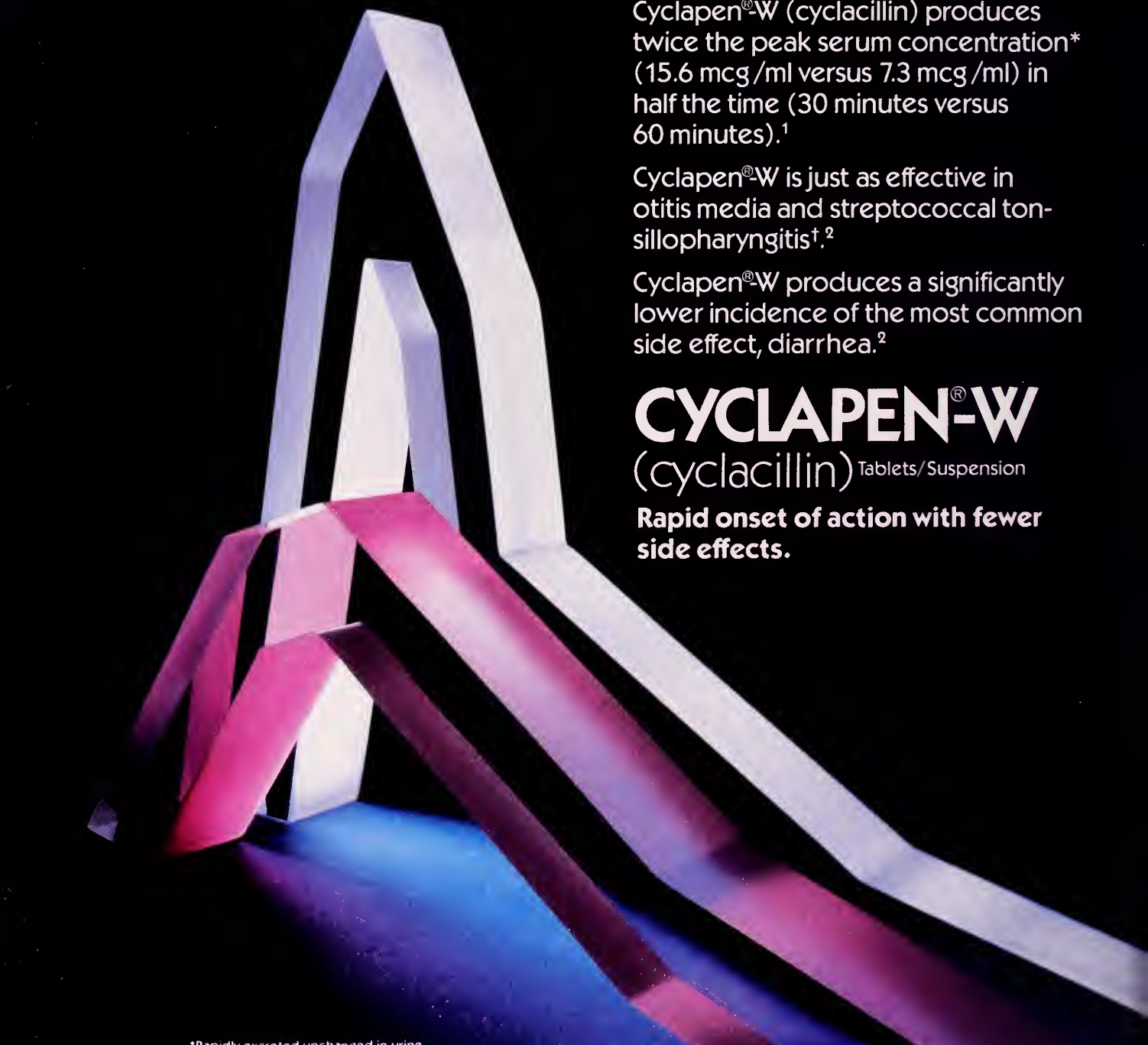
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2. Multicenter trials. Data to be published.

See important information on page after next.

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Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

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Bronchitis and pneumonia caused by S. pneumoniae (formerly *D. pneumoniae*)
Otitis media caused by S. pneumoniae (formerly *D. pneumoniae*) and *H. influenzae*
Acute exacerbation of chronic bronchitis caused by *H. influenzae**
*Though clinical improvement has been shown, bacteriologic cures cannot be expected in all patients with chronic respiratory disease due to *H. influenzae*.

SKIN AND SKIN STRUCTURES (integumentary) infections caused by Group A beta-hemolytic streptococci and staphylococci, nonpenicillinase producers.

URINARY TRACT INFECTIONS caused by *E. coli* and *P. mirabilis*. (This drug should not be used in any *E. coli* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment to monitor effectiveness of therapy and susceptibility of bacteria. Therapy may be instituted prior to results of sensitivity testing.

Contraindications Contraindicated in individuals with history of an allergic reaction to penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indications.

Serious and occasional fatal hypersensitivity (anaphylactoid) reactions have been reported in patients on penicillin. Although anaphylaxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cephalosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cephalosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Prolonged use of antibiotics may promote overgrowth of nonsusceptible organisms. If superinfection occurs, take appropriate measures.

PREGNANCY: Pregnancy Category B. Reproduction studies performed in mice and rats at doses up to 10 times the human dose revealed no evidence of impaired fertility or harm to the fetus due to cyclacillin. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, use this drug during pregnancy only if clearly needed.

NURSING MOTHERS: It is not known whether this drug is excreted in human milk. Because many drugs are, exercise caution when cyclacillin is given to a nursing woman.

Adverse Reactions Oral cyclacillin is generally well tolerated. As with other penicillins, untoward sensitivity reactions are likely, particularly in those who previously demonstrated penicillin hypersensitivity or with history of allergy, asthma, hay fever, or urticaria. Adverse reactions reported with cyclacillin: diarrhea (in approximately 1 out of 20 patients treated), nausea and vomiting (in approximately 1 in 50), and skin rash (in approximately 1 in 60). Isolated instances of headache, dizziness, abdominal pain, vaginitis, and urticaria have been reported. (See WARNINGS) Other less frequent adverse reactions which may occur and are reported with other penicillins are anemia, thrombocytopenia, thrombocytopenic purpura, leukopenia, neutropenia and eosinophilia. These reactions are usually reversible on discontinuation of therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becomes asymptomatic or until bacterial eradication is evidenced. In Group A beta-hemolytic streptococcal infections, at least 10 days' treatment is recommended to guard against risk of rheumatic fever or glomerulonephritis. In chronic urinary tract infection, frequent bacteriologic and clinical appraisal is necessary during therapy and possibly for several months after. Persistent infection may require treatment for several weeks.

Cyclacillin is not indicated in children under 2 months of age.

Patients with Renal Failure Cyclacillin may be safely administered to patients with reduced renal function. Due to prolonged serum half-life, patients with various degrees of renal impairment may require change in dosage level (see DOSAGE AND ADMINISTRATION in package insert).

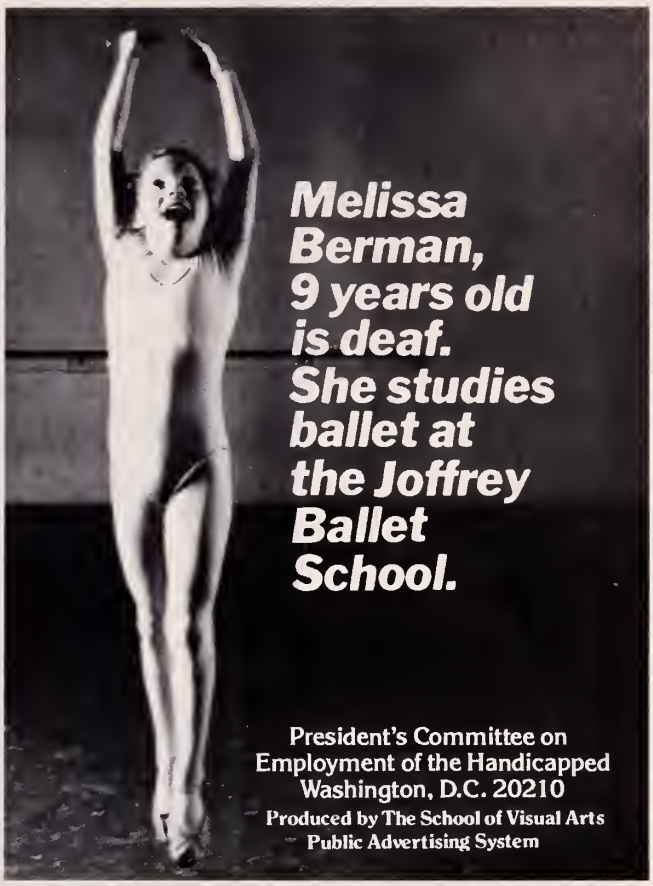
Dosage (Give in equally spaced doses)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg q.i.d. body weight > 20 kg (44 lbs) 250 mg q.i.d.
Bronchitis and Pneumonia		
Mild or Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chronic Infections	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Skin & Skin Structures	250 mg to 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should not result in a dose higher than that for adults.
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AUXILIARY



Ellen C. Sklar

Ellen Collins Sklar, will be installed as President of the Auxiliary to the Kentucky Medical Association at the State Convention on Tuesday, April 20.

Ellen was born and reared in Norwalk, Connecticut and graduated from St. Vincent School of Nursing. While working as Charge Nurse of a Medical/Surgical Men's Floor, she met her husband, Allen Sklar, M.D. Ellen and he were married in 1953 and settled on the California North Shore of Lake Tahoe.

The nearest hospital was in Reno, 35 miles away and over a 9,000 foot pass. Frequently, weather conditions closed the passes and the trip was 75 miles. The Lakeview Medical Clinic was opened by Allen and Ellen as nurse and assistant manager. The busy practice served injuries, sick workmen and skiers plus the family practice. The clinic was open seven days a week and until all patients were seen. It was almost impossible to obtain professional help as the area offered great beauty, but only the barest necessities.

In addition to the busy professional life, the Sklars reared two daughters. Family life at Tahoe required that everyone learn to walk on snow shoes and annual preparation for winter included a store of food to last at least a month and sufficient firewood for five-six months.

Ellen says that love, determination, challenge and the ability to adapt saw them through the early years, and it was with mixed emotion that they accepted a new challenge. Allen came to Kentucky to be Assistant Program Director and Associate Professor in the Family Practice Department which began at the UK Medical School in 1973.

Understandably, Ellen has had wide experience in civic and volunteer organizations. She is a Past President of Soropitimist International of Lake Tahoe, and was an active member of the Doctors Wives of Washoe County, a member of St. Mary's Hospital Guild, and the Washoe Medical Center's League. She is a member of Fayette County Medical Auxiliary where she has been Treasurer, and Chairman of Finance, AMA-ERF and Scholarship Loan Committee: Co-Chairman of Fund Raising Appropriations; and chaired various committee's for the Antiques Fair. She is a member of the UK Woman's Club. In AKMA she was Treasurer for three years and Finance Chairman.

She actively participates in jogging, bicycling, swimming and skiing. Allen and she are members of the League of American Wheelmen and the Bluegrass Wheelmen. They take pride in the fact that they cycle a Century Ride (100 miles) each September. In her spare time she also quilts, sews and knits. From her background and interest, it is obvious that Ellen is well-qualified to head the State Auxiliary next year.

Mrs. John Noonan
AKMA President

MEDICAL STUDENT SECTION

Letter of Welcome

The KMA House of Delegates at their 1981 meeting voted to create the Medical Student Section. Its purpose is to encourage and support participation of medical students in the Kentucky Medical Association and to provide a forum for their ideas. All Students enrolled in a Kentucky medical school and Kentucky residents attending out-of-state medical schools are eligible for membership.

This is a new organization, thus the extent of its activities will be limited only by our interest and commitment.

The framework for this organization needs to be constructed to meet the needs of medical students and to adapt to the ongoing changes taking place in medicine. If we do not take an active role, those changes will be made without sufficient input from our group. Organized medicine has been instrumental in improving the quality of health care. As future physicians, we have the opportunity to influence our medical societies. New members infuse an organization with vitality and direction for the future.

Students are represented in the KMA House of Delegates by a representative from each school. In addition, student representatives serve on various KMA committees. It is here that many policy decisions are made, and this gives students a chance to play an active role in deciding policy.

Your representative body, the Governing Council, is made up of five elected, appointed, or volunteered representatives from each school. All students are welcome to our meetings, in Lexington, to discuss current and future organizational plans, issues of concern to the students and prospective actions.

Even if you cannot or do not want to become actively involved, support those of your classmates who are involved. Voice your opinions to them.

We look forward to working with you in the coming years.

Gary Browning
Chairman, KMA-MSS Governing Council

Steve Wilson
President, KMA-MSS Governing Council

Editorial: Involvement

Our KMA Medical Student Section may be new, but we do express the needs of Kentucky medical students, not only on local and state levels, but also on the national level. We need to show our presence and express our desires to both AMSA and the AMA. To do this, all students need to be involved, and change these organization from within so they are more responsive to our needs.

The national AMSA convention is in San Diego at the end of March. In the past, this convention's tone was liberal, and not very close to the feelings of most Kentucky medical students. However, we did not speak up for our views. This year, we need to change this. Our goals should not be to totally change the direction of AMSA, but to bring our views into the open and make the rest of the AMSA members realize that we do not support many of the policies as they are now. To do this, we need involvement of all medical students in the state in voicing your opinions to your representatives. Together, we can change the policies of AMSA to more acceptable goals, better goals for the students of our state.

The same needs to be done at the AMA-MSS convention in June. Our delegations from U of L and UK should express the views of medical students of our state. We need your involvement in this to help shape the future of medical education and ultimately medical practice in the 1980's and beyond. Otherwise, these decisions will be made without us, and possibly against us. Our ultimate goal is to help make these decisions, and not to be left out or shut out, leaving us helpless in deciding important parts of our medical future. Please express your interests to your representatives now, and become involved.

KMA Medical Student Section

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Gary Browning, University of Kentucky

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Barbara Canida, University of Kentucky

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Keith Mornung
Nick Winer

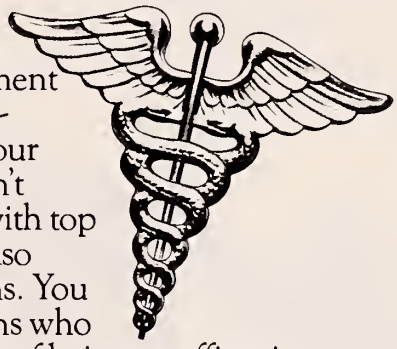
Editorial Writer
Steve Wilson

Any student contributions to this section of the KMA Journal will be gladly accepted. Please send any articles, letters, cartoons, criticisms, etc. to:

Steve Wilson
9015 Old Whipps Mill Rd.
Louisville, KY 40222

These contributions must be sent two months in advance of publication date.

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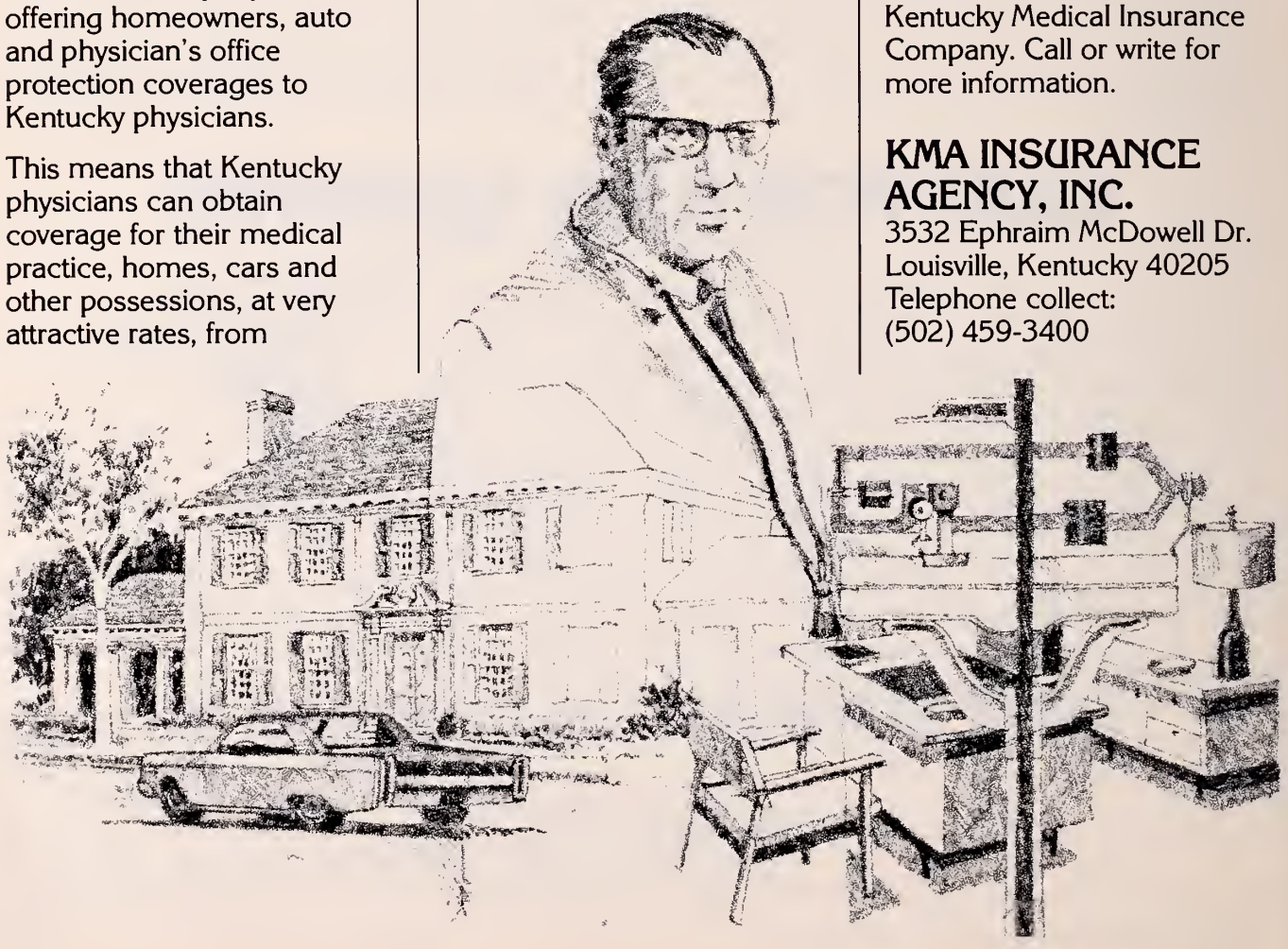
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Pico, the Ohio physician-owned insurance organization that assisted in the formation of Kentucky Medical Insurance Company, is offering homeowners, auto and physician's office protection coverages to Kentucky physicians.

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3532 Ephraim McDowell Dr.
Louisville, Kentucky 40205
Telephone collect:
(502) 459-3400

LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To the Editor:

In recent years, there has been unbelievable effort on the part of some physicians' office assistants to improve their understanding of and performance of their duties. To do this, they have taken advantage of seminars, local, state and national medical assistants' meetings and multiple courses of instruction. This has made them much better assistants and more understanding of their role in dealing with patients, laboratory procedures, telephone answering, handling of dressings, diet problems, injections, insurance forms and numerous other tasks that arise daily in physicians' offfices. These educational courses have been designed to meet the need of the single office assistant as well as the multiple assistants. When the office assistant improves, so does the physician and his patient because there is better understanding and communication. In this day when physicians and their assistants are often accused of being rushed, abrupt and not taking time to explain things to patients, such understanding and communication is sorely needed.

The A.A.M.A. and the Kentucky Chapter take pride in the increased professionalism apparent in those who have participated in such training and this is a plea for both physicians and their assistants to become more aware of A.A.M.A., to participate in the organization and to support it financially. It is also a plea for each physician to encourage his assistant to become a member so that she may be better trained to meet his multiple office needs.

Paul J. Parks, M.D.
Graves Gilbert Clinic, P.S.C
Bowling Green, KY

To The Editor:

A friend of mine from England sent me an RX for rheumatism.

I will send you this under same cover verbatim and I think it might be of interest to our readers.

Wilk Otis West, M.D., FACP

FOR RHEUMATISM

1 serving spoon brown sugar.
1 serving spoon Epsom Salts
6 red chillies.
1 lemon cut into 4 quarters

Put into 1 pint boiling water, and put into a warm place for 24 hours.

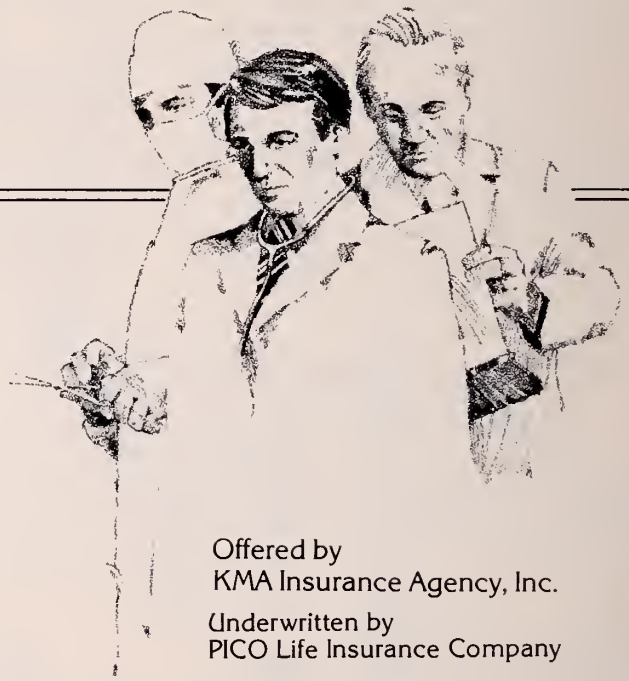
DOSE:

Take one wineglass full each morning. No more and no less.
Patience and perserverance is necessary for the desired result.

F. J. Jones
Age 80
Lancashire, England
1974

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Shreveport, Louisiana 71106
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*Reference: 1981-82 *American Druggist Blue Book*

SU-TON®

Liquid Tonic

A Tonic for Geriatric Patients

A pleasant tasting tonic containing iron, vitamins, minerals, and an analeptic. Ideal for those who may benefit from vitamin deficiency prevention. Just one tablespoon before each meal.

DESCRIPTION Forty-five milliliters of SU-TON contains the following ingredients: Pentylenetetrazol, 30 mg • Niacin, 50 mg • Vitamin B-1, 10 mg • Vitamin B-2, 5 mg • Vitamin B-6, 1 mg • Vitamin B-12, 3 mcg • Manganese (as Manganese Sulfate), 1 mg • Magnesium (as Magnesium Sulfate), 2 mg • Zinc (as Zinc Sulfate), 1 mg • Iron (as Ferric Pyrophosphate, Soluble), 22 mg • Alcohol, 18%

INDICATIONS AND USAGE SU-TON contains pentylenetetrazol which may be helpful in the older patient as an analeptic agent when mental confusion and memory defects are present. SU-TON also contains vitamins, trace minerals, and iron, for those patients who may benefit by preventing the development of a deficiency.

CONTRAINDICATIONS Epilepsy, convulsive disorders or known history of sensitivity to any of the listed active ingredients.

WARNINGS The safety of this preparation during pregnancy and lactation has not been established. Use of this drug requires that the physician evaluate the potential benefits of the drug against any possible hazard to the mother and child.

PRECAUTIONS Although there are no absolute contraindications to pentylenetetrazol, it should be used with caution in epileptic patients or those known to have a low convulsive threshold or a focal brain lesion. Caution should be exercised when treating patients with high doses of SU-TON who have heart disease. While pentylenetetrazol does not act directly on the myocardium, the results from central vagal stimulation could cause bradycardia.

ADVERSE REACTIONS Pentylenetetrazol in high doses may produce toxic symptoms typical of central nervous system stimulants, which act on the higher motor centers and the spinal cord. Convulsions resulting from this drug are spontaneous and are not induced by external stimuli. They usually last for several minutes and are followed by profound depression and respiratory paralysis. Death has been reported from the ingestion of 10 grams of pentylenetetrazol.

DRUG ABUSE Drug dependence has not been reported with SU-TON.

OVERDOSAGE Signs and symptoms of acute overdose may be due principally from overstimulation of the central nervous system and from excessive vasodilatation with resulting autonomic nervous system imbalance. The symptoms may include the following: vomiting, agitation, tremors, hyperreflexia, sweating, confusion, hallucinations, headache, hyperpyrexia, tachycardia. Treatment consists of appropriate supportive measures. If signs and symptoms are not too severe and the patient is conscious, gastric evacuation may be accomplished by induction of emesis or gastric lavage. Intensive care must be provided to maintain adequate circulation and respiratory exchange.

DOSAGE AND ADMINISTRATION One tablespoonful (15 ml) 3 times a day 20–30 minutes before meals. This drug is not for use in children under 12 years of age.

HOW SUPPLIED Bottles of 473 ml (16 fl. oz.) NDC 0524-1015-16

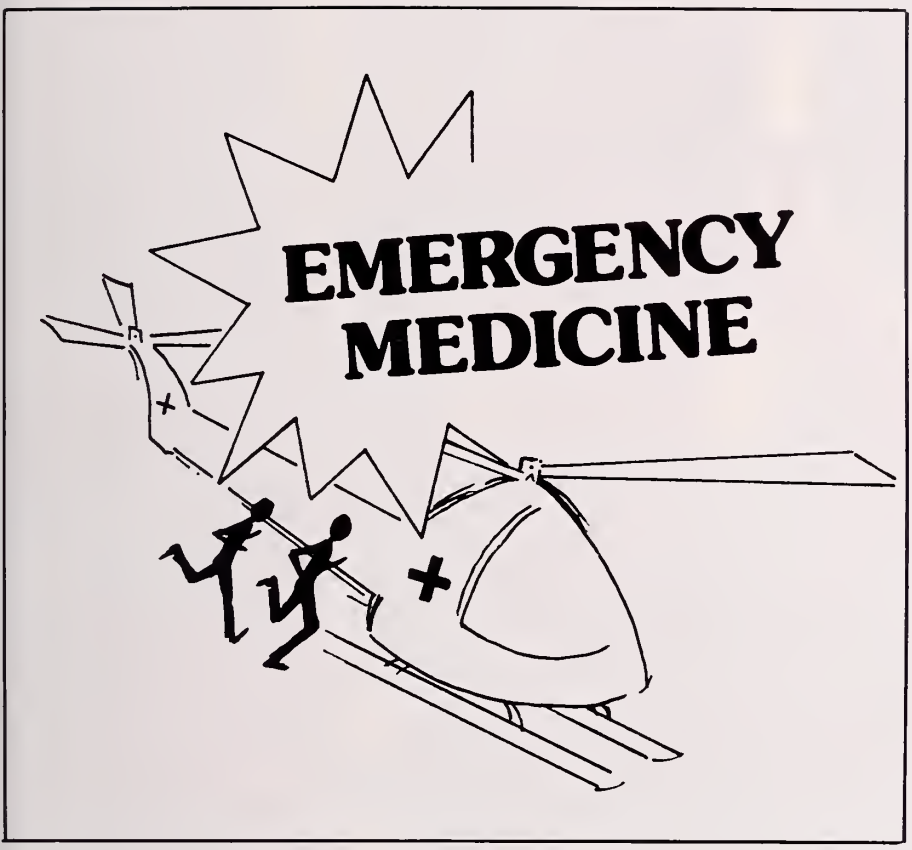
Federal law prohibits dispensing without prescription. February 1982

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ASSOCIATION NEWS



"Emergency Medicine" is the theme of the 132nd KMA Annual Meeting, September 20-23 in Lexington. Scientific sessions and specialty group meetings will be held at the Hyatt Regency beginning September 21st. While visiting Lexington, you may want to visit various attractions in the area. The Kentucky Horse Park on Route 6 features guided tours, a museum, a horse-drawn tour, antique carriage display, restaurant and gift shop. The Hunt-Morgan House is another highlight of Lexington's history. Built in 1814 by John Wesley Hunt, this Federal house is a living museum representing the days when Lexington was known as the "Athens of the West." It was later the home of Mr. Hunt's grandson who led the Morgan Raiders and was known as the "Thunderbolt of the Confederacy." The rooms are furnished with articles of the period as well as those owned by the family.

The Medicaid Program will begin using the standard claim form HCFA 1500 beginning July 1. Most all other major carriers and payors have already begun using the form. The Medicare Part B carrier and Blue Cross-Blue Shield have been furnishing these forms to physicians at no charge, but both organizations report that far more forms are being ordered than are being used. They urge physicians to order only the amount of forms that they will actually need. Because of printing cost overruns, there is a possibility that the offering of these forms by the organizations may have to be terminated.

Hertz recently announced an increase in the discount rate for rental automobiles under the KMA discount program. Effective April 1, KMA members will receive an 8% discount on published daily, weekly and monthly "Standard Unlimited Mileage" rates. To obtain the special KMA rate, members must have the Hertz ID stickers and must meet Hertz standard driver and credit qualifications at the time of rental.

Champus News—If you are using the uniform claim form, HCFA-1500, CHAMPUS 501, CHAMPUS must have the following information:

Box 6: This box must contain the sponsor's (military person's) Social Security number and also the effective and expiration dates from the patient's ID card.

Box 8: CHAMPUS must have the sponsor's branch of service and the sponsor's status (active duty, retired, deceased). These may be abbreviated.

Box 12: This must contain an original signature (the patient's if patient is 18 or over, a parent's or guardian's if patient is under 18).

Box 13: Not applicable to CHAMPUS. If you wish to accept assignment, complete boxes 25 and 26.

Failure to supply CHAMPUS with this information will result in a delay or denial of your claim.

Growth
potential...
Growth
problems.

TGE© helps you identify both.

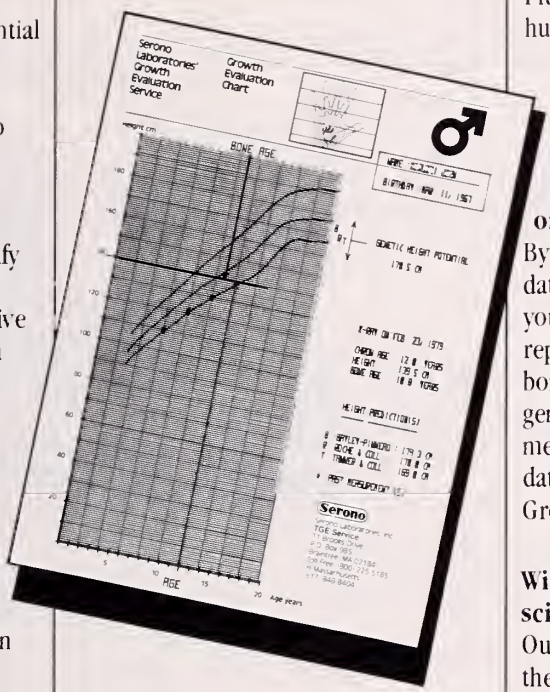
In many types of growth disorders, early diagnosis and therapy are essential in order for a child to reach full height potential.

That's why it's so important to discover these disorders as soon as possible.

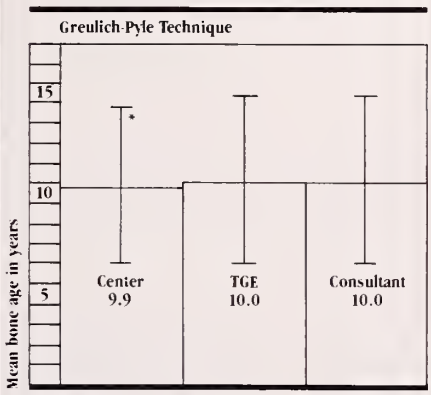
Now, a special, computerized screening service can help you identify both growth potential and growth problems in time for the most effective treatment—TGE: Theoretical Growth Evaluation.

TGE offers:

Inexpensive, computerized screening.
Using sophisticated, computerized screening techniques, TGE helps you determine whether a child would benefit from referral to an appropriate specialist for further evaluation and testing. Or whether the child's growth is normal, enabling you to reassure the parents.



Proven accuracy, extensive experience.
Studies comparing the bone age determinations of TGE with major pediatric endocrinology centers[1] and a pediatric endocrinologist/consultant have demonstrated the accuracy of TGE:



Correlation Coefficient 0.990 (TGE vs Center)
0.998 (TGE vs Consultant)

No statistically significant differences exist between TGE and either the Pediatric Center[2] or the Pediatric Endocrinologist/Consultant[3]

*Standard Deviation

Plus, our experience of reading hundreds of X-rays has helped us reduce reader variability while also increasing standardization from case to case.

Height predictions on standard growth curves.
By simply providing relevant patient data, along with a hand-wrist X-ray, you will receive a computer-generated report containing patient information, bone age, height age, height predictions, genetic height potential and past measurements...all presented on a data sheet as well as plotted on a Growth Evaluation Chart (left).

Widely accepted scientific methods.
Our trained X-ray analysts use both the Greulich-Pyle and Tanner methods of bone age determination. Height predictions of Bayley-Pinneau, Roche et al., and Tanner et al. are computer-calculated and highly reliable.

TGE. Another helping hand for physicians. For more information, or patient evaluation forms, call Serono Laboratories' TGE Service *toll-free at 800/225-5185*. In Massachusetts, 617/848-8404.

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Boston Children's Hospital
[2]S. D. Frasier, M.D., University of Southern California
[3]M. Zachmann, M.D., Kinderspital, Zurich, Switzerland

Postgraduate Opportunities

APRIL

1 Twenty-seventh Annual Spring Clinical Conference, presented by the Lexington Clinic, Lexington

15-17 Continuing Medical Education Course, University of Kentucky, Advances in Clinical Cardiology-1982, Hyatt Regency Hotel, Lexington

17 Using Laser in Glaucoma, Bethesda Hospital and Deaconess Association, The Vernon Manor Hotel, 400 Oak Street, Cincinnati, OH

22-24 Eighth Annual High Risk Pregnancy Management Course, Hyatt Regency, Louisville

23-25 Emergency Medicine for the Primary Care Physician, Fort Magruder Conference Center, Williamsburg, VA

26-28 ACEP Southeast Congress of Emergency Medicine, Practical Aspects of Emergency Management, Galt House, Louisville

MAY

2-5 Trauma '82: Counterpoint, The First Annual Eastern Tri-Regional Trauma Conference for Physicians and Nurses, Resorts International, Atlantic City, New Jersey

5-8 63rd Annual Meeting of the Virginia Society of Ophthalmology & Otolaryngology, Inc., Williamsburg Conference Center, Williamsburg, VA

14-15 Vitrectomy Course, University of Louisville, Health Sciences Center, Louisville

20 Allergy-Immunology Update, Hyatt Regency, Louisville

20-22 Adolescent Gynecology, Hyatt Regency, Louisville

20-23 Kentucky Surgical Society Annual Meeting, Lure Lodge, Lake Cumberland State Park

23-28 Continuing Medical Education Course, University of Kentucky, 13th Family Medicine Review-Session II, Hyatt Regency, Lexington

JUNE

2-4 Continuing Medical Education Course, University of Kentucky, 11th Update In OB-GYN, Hyatt Regency Hotel, Lexington

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA

13-18 Seventh Annual Family Medicine Review, Galt House, Louisville

JULY

27-31 Fifth Annual Symposium on Contempory Clinical Neurology, Palmetto Dunes Hyatt Resort, Hilton Head Island, SC

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

SEPTEMBER

10-11 Diseases of the Ear, Bethesda Hospital and Deaconess Association, Stouffer's Cincinnati Towers, 141 W. Sixth Street, Cincinnati, OH

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

31-5 Continuing Medical Education Course, University of Kentucky, 13th Family Medicine Review-Session III, Hyatt Regency Hotel, Lexington

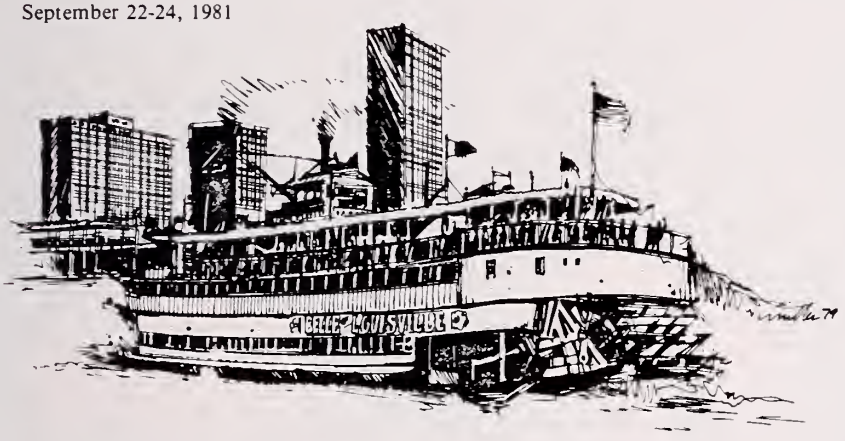
NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

KENTUCKY MEDICAL ASSOCIATION

Ramada Inn-Bluegrass Convention Center, Louisville

September 22-24, 1981



ANNUAL MEETING

EXHIBITOR PROSPECTUS

The drawing on the left is from the cover of the 1981 **KMA Exhibitor Prospectus** which was chosen as winner of the "Best Prospectus" Award presented by the Health Care Exhibitors Association. The KMA Prospectus was chosen as best from all state and regional associations. The award was presented to Robert G. Cox, Executive Vice President of KMA, at the Joint Conference on medical conventions in Washington, D.C.

The Third Annual Kareem B. Minhas Memorial Lectureship will be held Wednesday, April 21, 1982, 12:00 noon at the University of Louisville.

Speaker: William J. Rashkind, M.D. Professor of Pediatrics, University of Pennsylvania School of Medicine.

Topic: Treatment of Congenital Heart Disease with Cardiac Catheters: Balloons, Umbrellas and Boiler Plugs

Lecture qualifies for 1.0 hour of category I credit

Kentucky Blue Cross and Blue Shield has established a program for Kentucky physicians to determine the status of payment for physicians services filed under Blue Cross and Blue Shield Major Medical.

Physicians may contact the Blue Cross and Blue Shield Special Benefits Correspondents, (502) 423-2180, to determine if a major medical claim has been received for specific services rendered by the inquiring physician, to determine if payment for that service has been made and, if so, the date of payment.

When making an inquiry, the inquiring physician's office must provide the name of the patient, and the patient's certificate number.



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(diethylpropion hydrochloride USP)

75 mg controlled-release tablets

A useful short term adjunct in an overall weight loss program

The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 17 separate double-blind, placebo controlled studies attest to its usefulness in daily practice. (Citations provided on request.)

Comparison of Anorectics

	Agent	Amine Classification	Half-life[a]	Variety of Dosage Form	Degree of CNS Effects
Low Abuse Potential	**Diethylpropion**	Tertiary	4-6 hrs.	25 mg tablet, 75 mg controlled-release tablet	Mild euphoria, mild stimulation
	Mazindol	Nonphenylethyl-amine	33-55 hrs.	1 & 2 mg tablet	Mild euphoria, mild stimulation
	Fenfluramine	Secondary	10-30 hrs.	20 mg tablet	Moderate sedation (mild to moderate depression, a side effect, is also sometimes designated as a CNS effect)
	Phentermine	Primary	19-24 hrs.	8 & 37.5 mg tablet, 8, 15 & 30 mg capsule 15 & 30 mg capsule (resin complex) 15 & 30 mg timed release capsule	Mild euphoria, moderate stimulation
High Abuse Potential	**Phenmetrazine**	Secondary	7-9 hrs.	25 mg tablet, 50 & 75 mg prolonged action tablet	Marked euphoria, marked stimulation
	Amphetamine	Primary	10-30 hrs.	Various	Marked euphoria, marked stimulation

[a]Delayed release characteristics of certain dosage forms must also be taken into account.

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(diethylpropion hydrochloride USP)

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controlled-release
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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. When central nervous system active agents are used, consideration must always be given to the possibility of adverse interactions with alcohol. *Drug Dependence*: Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*: Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*: Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular*: Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*: Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*: Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*: Urticaria, rash, ecchymosis, erythema. *Endocrine*: Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*: Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*: A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of June, 1980

Reference: 1. Abramson R, Garg M, Cioffari A, and Rotman PA, An Evaluation of Behavioral Techniques Reinforced with an Anorectic Drug in a Double-Blind Weight Loss Study. J Clin Psych 41:234-237, 1980.

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REQUIREMENTS: US citizen; pass aviation physical examination; completion GME 1.

PROCEDURE: Submit CV to:

LCDR Freda Jones
Department of the Navy
Medical Programs
600 Federal Place, Louisville, KY 40202
or Call (502) 582-5174

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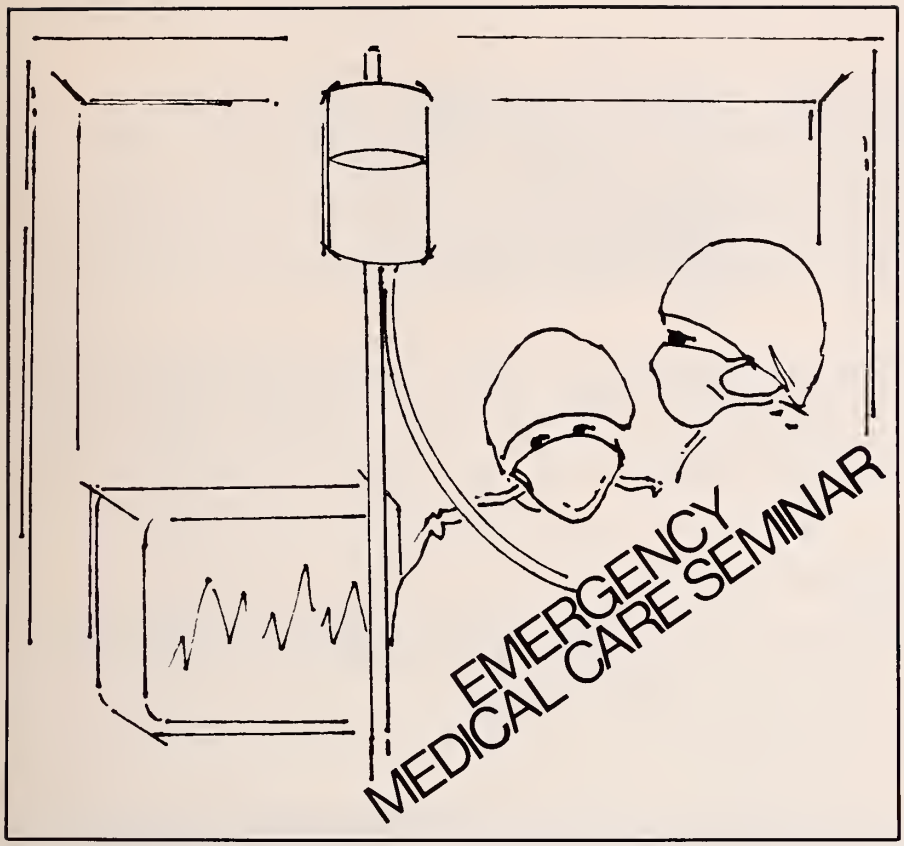
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The 1982 KMA Emergency Medical Care Seminar will be held June 8-10 at the Executive West Motel, Louisville. The meeting is open to physicians, nurses, EMT's, paramedics and others interested in Emergency Medical Care. George R. Nichols, II, M.D., Louisville, will address the topic, "Coal Mine Disasters," on Wednesday, June 9, during the luncheon session. The luncheon speaker on Tuesday, June 8, will be Michael F. Olsen, Managing Director, The Foundation for Fire Safety. He will speak on "The Impact of Burning Plastics on EMS Systems; Lessons Learned at the MGM." Registration fee for the meeting is $20/day for KMA members, $40/day for nonmember Kentucky physicians. Additional details are available from the Headquarters Office.

K. I. S. S.

Nearly every business seminar presented has the above for advice—Keep It Simple Stupid!

We do run a simple business and simply pay most claims for disability the day they're received, have an answering device when we can't be in the office to allow prompt and simple answers. In general, we try to make it easier for our clients.

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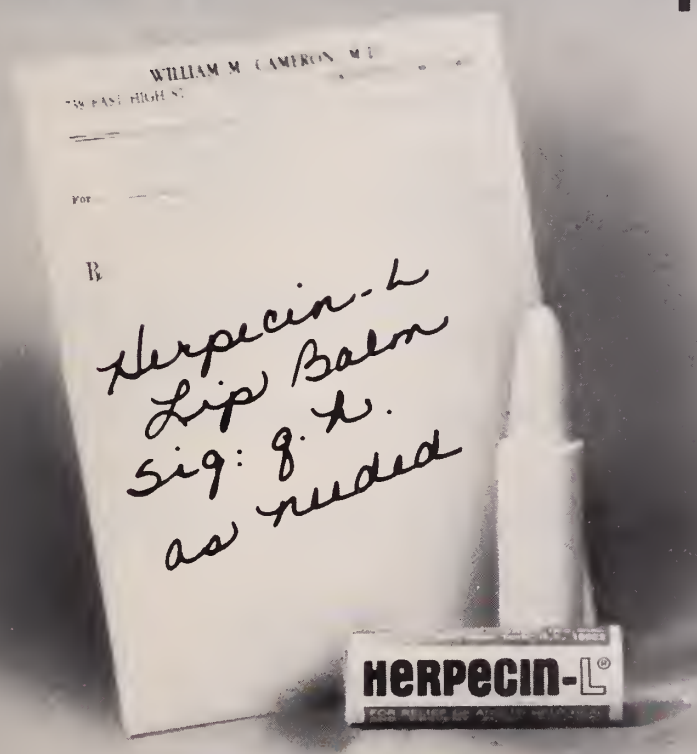
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The page of Kentucky Specialty Group Officers published in the February *Journal of KMA,* page 109, incorrectly listed Prue W. Kelly, M.D. as President of the Kentucky Society of Pathologists. **Robert S. Howell, M.D.,** Jewish Hospital, Louisville, 40202 is this year's President.

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Impaired Physicians Committee at the KMA Office: 502-459-9790. Or call one of the committee members listed below.

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Indicetions end Usege: For the treetment of urinery trect infections due to susceptible streins of the following orgenisme: *Escherichie coli, Klebsiella-Enterobacter, Proteus mirebilis, Proteus vulgaris, Proteus morganii.* It ie recommended thet initiel episodee of uncompliceted urinery trect infections be treeted with e single effective entibecteriel egent rether then the combinetion. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

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Werninge: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosege: Not recommended for infents less then two months of ege.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment: Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. **2.** Data on file, Medical Department, Hoffmann-La Roche Inc.

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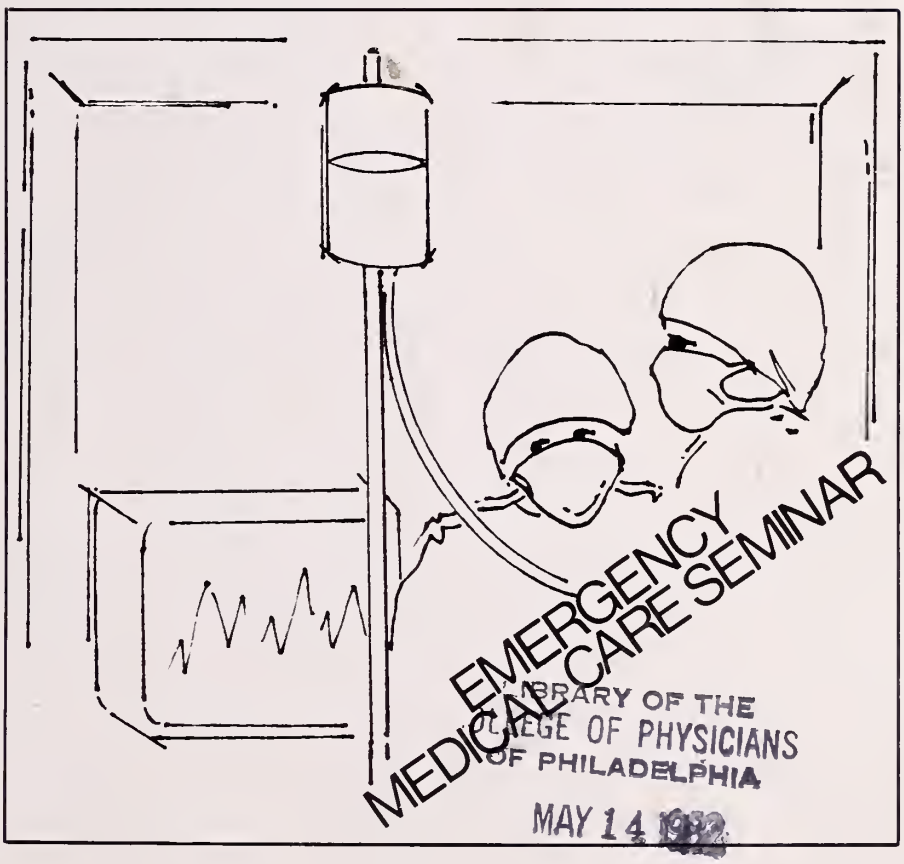
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Please see previous page for summary of product information.

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May 1982
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Number 5

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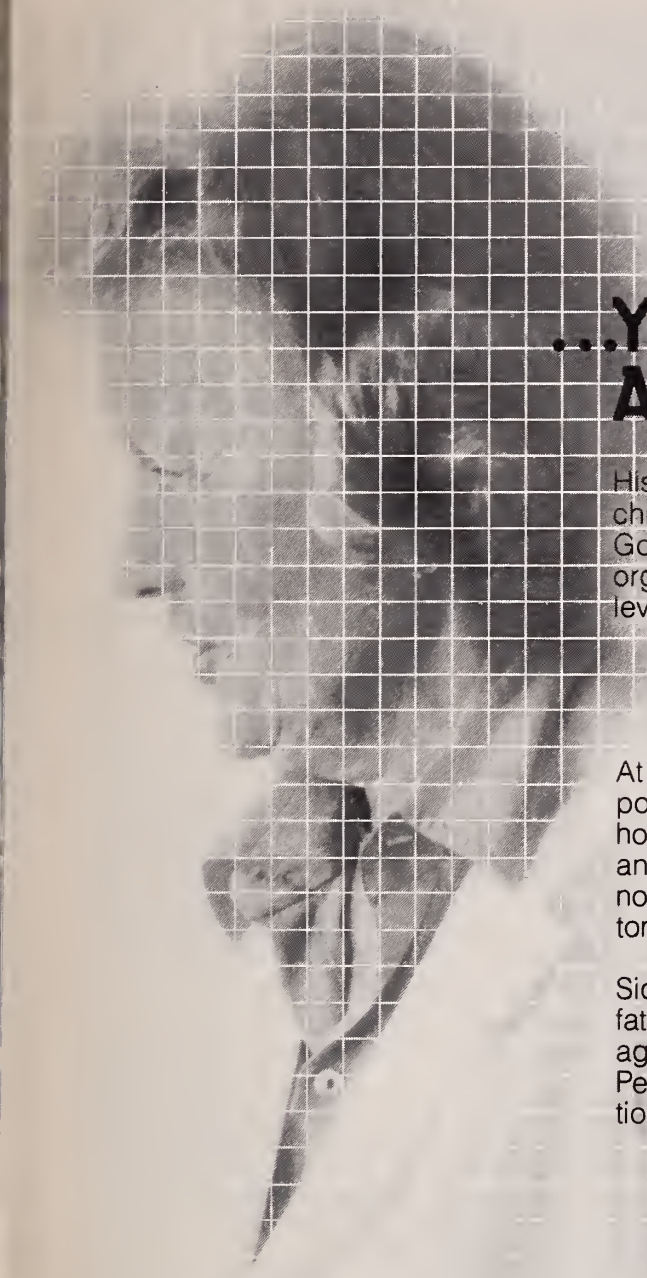


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...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

For rapid relief you prescribe Valium (diazepam/Roche)

At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

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diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED THE PATIENT NEEDS IT

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Please see summary of product information on the following page.

VALIUM® (diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults.* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500,* Prescription Paks of 50, available in trays of 10 * Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10.†

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Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Committee on Physicians' Health

The Journal Of The Kentucky Medical Association

USPS 280-700

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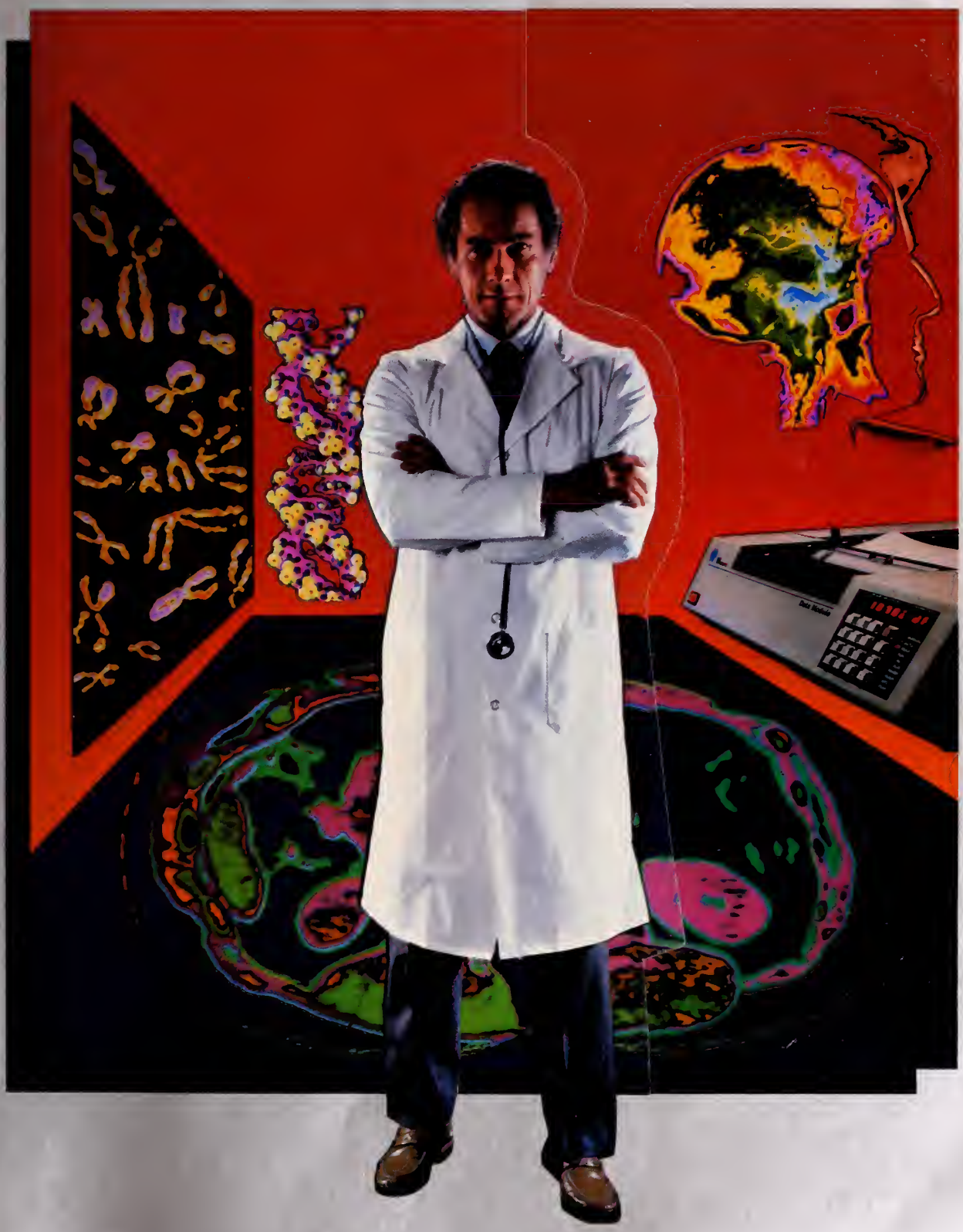
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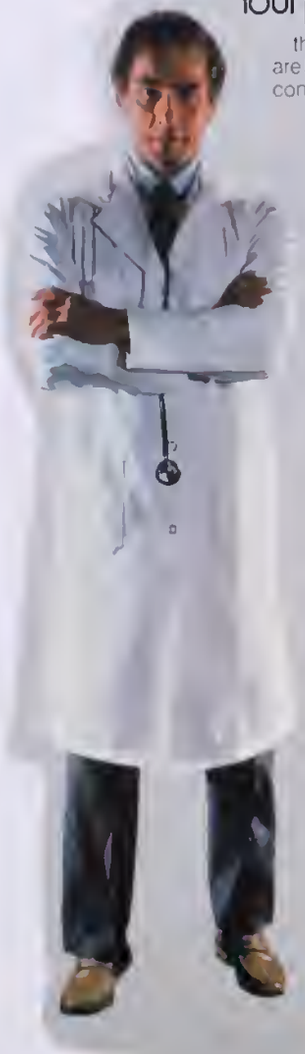
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In an era of change,
An Agent of Change...





Your patients are changing

the population is getting older, more people are holding a second job, patients are more concerned about the medications they take

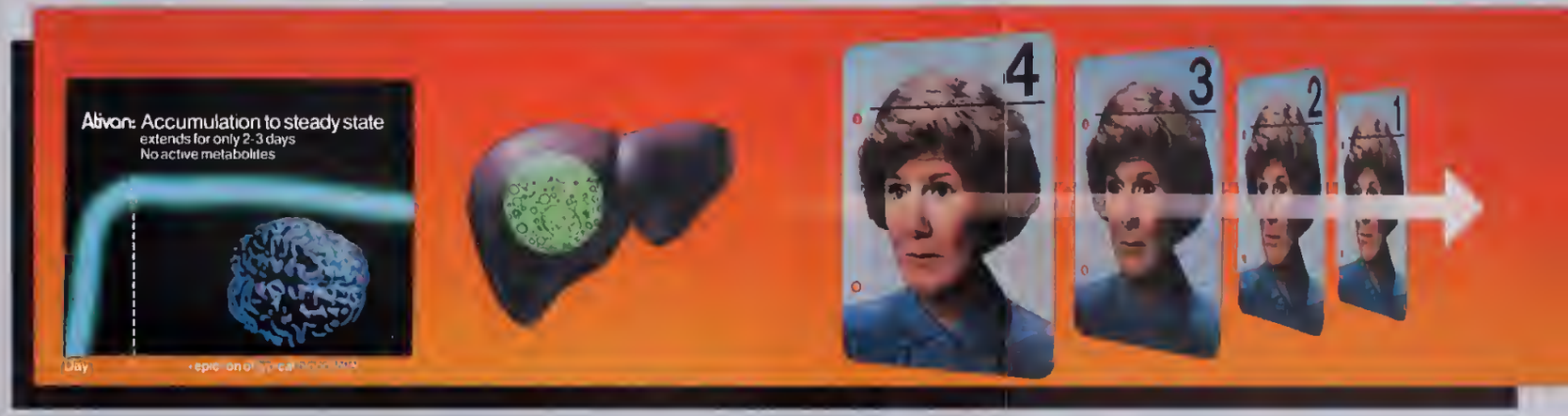
Medical knowledge is changing

there are diagnostic resources and surgical techniques undreamed of only a few years ago, biomedical engineering, new insights also into the action of drugs

In this changing environment, the way you are practicing medicine is changing too...

Twenty years ago, the benzodiazepines represented a real step forward in the management of anxiety and tension states. In recent years, however, concern about drug accumulation and clearance has led physicians to re-evaluate their use of these agents. In light of current knowledge, many clinicians are changing from multi-metabolite benzodiazepines to Ativan® (lorazepam)—a metabolically and pharmacokinetically distinctive agent that offers clinical advantages which more closely meet the expectations of a modern anxiolytic.

Ativan®: Agent of Change (lorazepam)



because...

it's shorter acting, with less accumulation*

In contrast to long-acting benzodiazepines, Ativan has a short, 12-hour half-life, and no active metabolites. In multiple-dose therapy, Ativan accumulates for only two to three days before reaching steady state, the long-acting benzodiazepines—diazepam CIV, chlordiazepoxide CIV, clorazepate CIV and prazepam CIV—with their active metabolites—accumulate for as long as 20 days, increasing the likelihood of excessive sedation.

it doesn't interact with drugs metabolized by P450 microsomal enzymes

Most benzodiazepines undergo oxidative metabolism and thus utilize the hepatic microsomal enzyme system. Ativan® (lorazepam), however, is metabolized by glucuronidation and does not compete with other drugs for cytochrome P450. Thus, when Ativan is given with Tagamet® (cimetidine), for example, clearance is not delayed, nor sedation increased†—unlike reported observations with patients on other benzodiazepines[1-5].

it gives you greater control of therapy

The short half-life of Ativan® facilitates more rapid response to dosage adjustments, allowing you to titrate therapy to patients' changing needs. Also, once you decide to discontinue Ativan, it will be out of your patient's system four days after the final dose—in contrast to long-acting benzodiazepines and their active metabolites which take as long as two weeks to be totally eliminated.

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*Pharmacokinetics cannot as yet be directly related to efficacy.

†All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

Ativan® for (lorazepam)® Anxiety

See important information on following page.

Ativan®: Agent of Change

(lorazepam) IV



- Little accumulation lessens likelihood of excessive sedation
- Unlike most benzodiazepines, Ativan does not compete with other drugs, such as Tagamet® (cimetidine), for the microsomal enzyme system during biotransformation
- Metabolism not affected by age or liver dysfunction
- Short half-life provides greater control of therapy
- Promptly eliminated from patient's system after discontinuation
- Specifically evaluated and found effective for anxiety associated with cardiovascular and gastrointestinal disorders
- A distinctive change from long-acting benzodiazepines, all of which have active metabolites and are much the same

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

How Supplied: **0.5, 1.0 and 2.0mg tablets.**

Wyeth Laboratories Philadelphia, PA 19101

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PRESIDENT'S PAGE



Fellow Kentuckians:

Traditionally the May editorial is done by the AMA delegation. On behalf of Fellow Delegates Fred Rainey, Harold Haller and Alternate Delegates, Lee Hess, Ken Crawford and Wally Montgomery, I report some current information and thoughts regarding the American Medical Association.

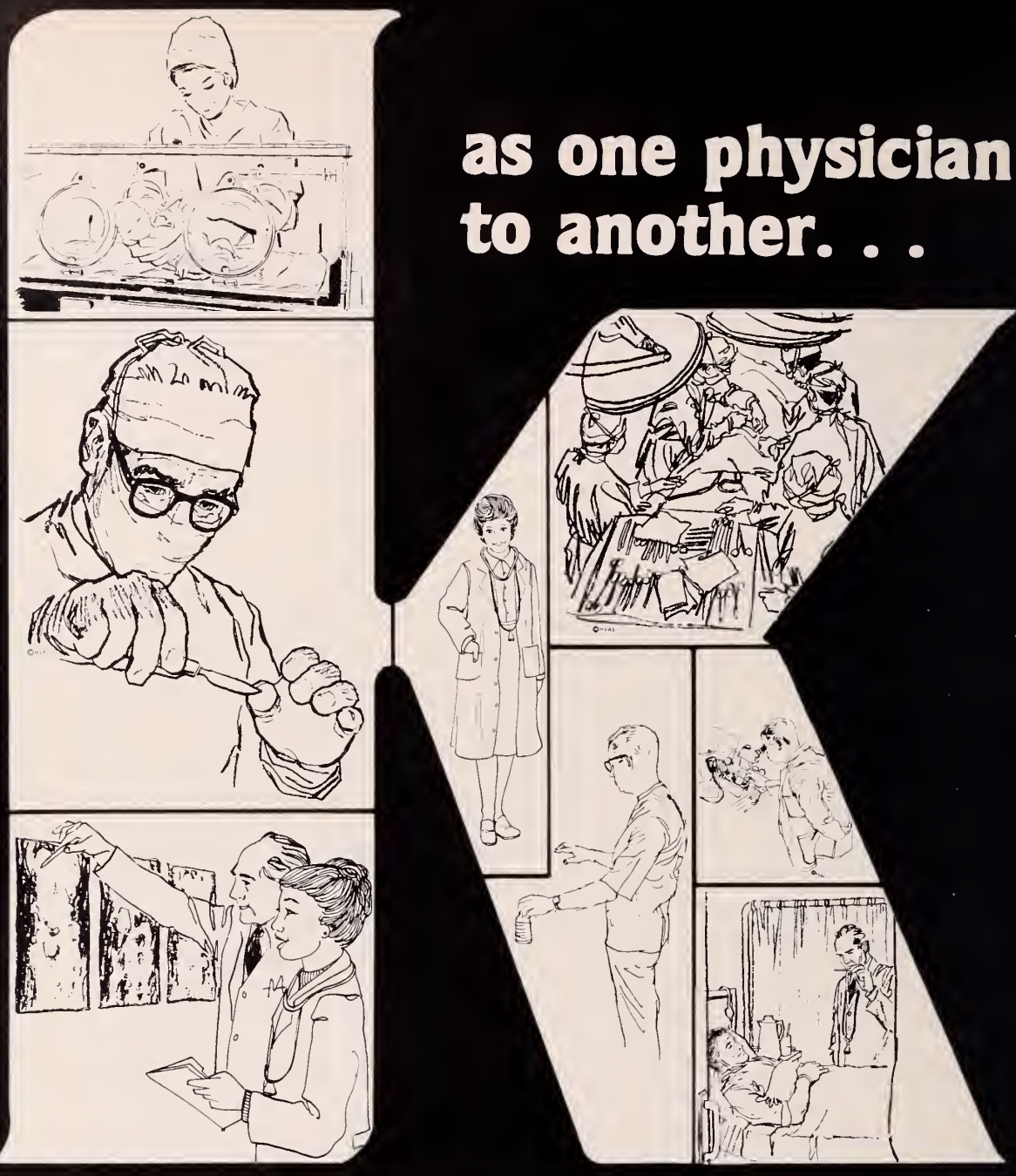
Highlighting our current activities is the campaign of Fred Rainey for Board of Trustees. This year two incumbents are competing with seven aspirants for four spots. The competition is fierce, but with the help of many members of the KMA and people from other states, Fred Rainey's chance of election is excellent. On behalf of the delegation, I thank you for your past support of our other candidates such as Bob Long, Hoyt Gardner and, in particular, for your present support of Fred Rainey.

The AMA House of Delegates has changed its structure and composition in recent years. Many more national speciality societies are now represented by their own delegate. At present, we have about 60 such delegates with six more to be added this year. Also, the state delegations have increased their representatives so that now there are 275 delegates and 275 alternates in the AMA House of Delegates. Turn over is much more rapid with delegates, both men and women, white and black, serving for fewer years. I believe that these changes have been healthy and have brought the composition of the House of Delegates more in line with the medical profession as it exists in the United States. The House meets twice a year, June and December, usually covering about 200 items at each convention. Our next convention is scheduled for June 13-17 in Chicago, Illinois.

Many have compared the AMA to an umbrella. This implies that it will shield the medical organizations and their constituent physicians from unpleasant objects falling upon them. I do not personally like this analogy as I think the AMA cannot shield us from realities of life. However, I do think that by providing a federation of increasingly diverse medical interests, the American Medical Association, strong through the unity of its members and with its policy democratically determined by the House of Delegates in open debate, can provide for advancement of interests of the American Public and for the physicians of the United States.

Many forces in the United States would like to change our system of medical practice. Having just returned from Italy, South Africa and Brazil, I am even more convinced that our system of practice offers the best medical care to the most for the least cost. To preserve and protect those elements which are good and to strive to change those elements of our present system which are bad, a strong national unified organization is obligatory. Forces within the government, within the public, hospitals, our various third party pay systems, etc. need to have someone with whom they can communicate. I know of no organization which can do it better than the AMA. I, therefore, request your continued support by your membership and by your participation. Your delegates and alternates are at your service. Please call on us.

David B. Stevens, M.D.
Senior Delegate to AMA



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The Journal Of The Kentucky Medical Association

May 1982 Volume 80 Number 5

SCIENTIFIC

Lung Cancer in Women

A Twenty-five Year Review

PORTER MAYO, M.D., SIBU P. SAHA, M.D. &
CAMILLE M. JERNIGAN, M.A.

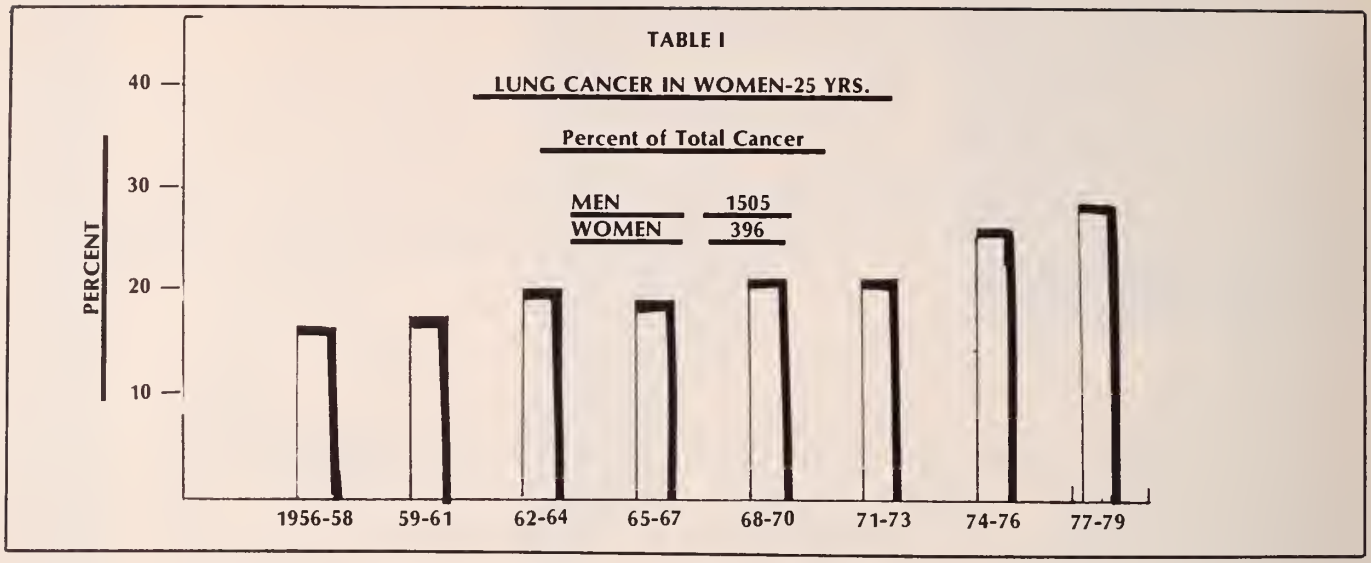
During the past 20 years a virtual epidemic of lung cancer has occurred in women. Our review (1955-1979) of 396 women having lung cancer shows 34 survivors. Epidermoid carcinoma, the most common cell type is also the cancer most frequently associated with cigarette smoking. We can expect the death rate to continue its rapid rise as women adopt cigarette-smoking habits similar to those of men. Within three years lung cancer could become the leading cancer killer of women, overtaking breast cancer.

LUNG cancer, according to Walshe in 1898, was a rare disease which occurred about equally in both sexes.[1] In 1950, women accounted for fewer than one out of 12 deaths from lung cancer. Wynder, in 1956, stated that "lung cancer is still a rather uncommon disease among women, so that a sufficient number of cases cannot be easily obtained."[2] In 1968, women represented one-sixth of all lung cancer deaths. By 1979, women accounted for one-fourth of all lung cancer deaths.[3,12] It is predicted that by 1984 lung cancer will replace breast cancer as the leading cause of death from cancer among women.[4]

Women have no special immunity from lung cancer—in fact, the growth rate of lung cancer deaths is presently higher in women than in men. The risk of lung cancer in women-smokers will approach that of men-smokers—eight to 12 times that of non-smokers within the next few years.[5] While a great number of men began smoking cigarettes during World War I women did not follow suit until 25-30 years later. Smokers today are exposed to industrial hazards which act synergistically with cigarette smoke.[6] Unfortunately, as the Surgeon General (1979) has suggested, "current figures may not yet constitute a demonstration of the maximal effects of smoking in women." Even more ominous, the rising rate of cigarette smoking among teenage girls suggests that lung cancer will increasingly affect younger as well as older women.

The following data relates our experience with bronchogenic carcinoma in women from 1956 through 1979. **Number of patients:** Our series of 396 cases of lung cancer in women represent 20.7% of our lung cancer patients (1901 patients, 1956-1979). The percentage of women patients

From Mayo, Long and Saha, Thoracic and Cardiovascular Surgery, Lexington, Ky. Reprint requests to: Porter Mayo, M.D., 168 Burt Road, Lexington, KY 40503



has increased dramatically in the past decade. (Table 1)

Age: Lung cancer is a disease of advancing age, the greatest incidence being reported in patients between 55 and 70 years of age. This impression is confirmed in our review. (Table 2) The average age in the two most common cancer cell types was as follows; squamous cell carcinoma 61 years and adenocarcinoma 59 years. Smokers in both groups developed cancer eight years and seven respectively earlier than never-smokers.

Smoking History: Seventy-five percent of patients in which a smoking history was obtained were smokers and 25% had never smoked. Epidermoid carcinoma was most often associated with those who smoked. Adenocarcinoma was by far the most common in the non-smoker. Eighty-five percent of those patients having epidermoid cancer were smokers; 55% of patients having adenocarcinoma were smokers.

Cell Type: The occurrence of the five major types of lung cancer in all patients is presented in Table 3. Cell type plays a most important role in determining the mode of therapy and also prognosis. Cell type of our five-year survivors (Table 4) shows the best prognosis in those patients having epidermoid carcinoma and the poorest shared by the small cell and large cell types. Of our 396 patients tissue biopsies confirmed the diagnosis in 307 patients. Eighty-nine patients were either moribund when first examined or refused any diagnostic studies, therefore, eliminating tissue confirmation.

Surgical Resection: 57.9% of our patients were inoperable when first examined. They were treated by other modalities, namely, radiation therapy and chemotherapy. Of those patients considered to be surgical candidates successful resections were performed in 42.1%. The remaining 57.9% were non-resectable. During the past five years the percent of successful resections has increased to 52% attributable primarily to an earlier diagnosis. Of those patients having successful resections, single lobectomy (54.8%) was the most common procedure followed by pneumonectomy (31.5%) and bilobectomy in (13.7%).

Results: All five-year survivors were among those having resections of the malignancies. Eighty-eight percent of those survivors had successful surgical resection with no evidence of residual cancer. The remaining 12% had partial resections and radiation or combinations of resection, radiation and chemotherapy. Of the 396 patients, there are 34 survivors (8.8%) 16 of which are five-year survivors.

Discussion: The past 20 years have shown a virtual epidemic in deaths from lung cancer in men and an even more rapid rise in lung cancer among women.

The smoking habits of men tend to reflect their socioeconomic levels: Men in higher educational and income groups smoke less; men in lower groups smoke more. We cannot, however, make such generalizations for women. A

TABLE II

AGE DISTRIBUTION

30-40	3
40-50	42
50-60	109
60-70	87
70-80	58
80-90	8
Total (Tissue Confirmed)	307

survey by the American Cancer Society shows a greater decline in the number of doctors who smoke than that of nurses, over a 13-year period, and shows a much higher smoking rate among nurses than among other women.[6]

With the exception of skin cancers, the largest number of new cases (about 122,000) and of cancer-associated deaths (105,000) will again involve carcinoma of the lung (1981).[7] About 90% of lung cancer patients die of the disease.[8] Therefore, a close relationship exists between incidence and death rates. The available data support the idea that increasing lung cancer rates among women are the consequence of their smoking habits. Wynder (1973) states that the current lung cancer rate of 13/100,000 could be reduced to about 3/100,000 by the elimination of cigarette smoking.[9]

Even though we have the knowledge of how to prevent a leading cause of death from cancer, effective implementation has been frustrated. Women, now more self-sufficient with greater disposable income, are the target of intensified efforts to induce them to smoke.[10] Teenagers, especially girls, have taken up smoking at an earlier age than previously and they smoke more heavily.[11,12] Apparently, we are unable to modify behavior in such a way as to influence health when the perceived risk is minimal.

TABLE III

OCCURRENCE OF FIVE MAJOR TYPES OF LUNG CANCER IN WOMEN

1. Epidermoid	36%
2. Small Cell	15%
3. Adenocarcinoma	35%
4. Large Cell	9%
5. Bronchiolar	5%

TABLE IV

LUNG CANCER IN WOMEN

Cell Types: 5 Year Survivals

1. Epidermoid	41%
2. Adenocarcinoma	27%
3. Bronchoalveolar	20%
4. Small Cell	6%
5. Large Cell	6%

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Transluminal Angioplasty (TLA) in Occlusive Vascular Disease

RICHARD K. STEVENS, M.D., GORDON L. HYDE, M.D. & FANG K. LOH, M.D.

Transluminal angioplasty represents a technical breakthrough in the treatment of occlusive vascular disease. The mechanism, technique and complications are discussed.

THE concept of transluminal angioplasty (TLA) began with Dotter and Judkins in 1964.[1] They introduced a co-axial catheter system to dilate narrowed vessels forcibly. Although successful, this technique never gained wide acceptance in the United States. However, many European investigators adopted, modified and improved upon the original Dotter concept.[2,3,4]

In 1974 Andreas Gruntzig introduced a new balloon catheter.[5] Since then, there has been an increased interest in TLA worldwide. Transluminal angioplasty is now being performed routinely by angiographers the world-over including the University of Kentucky Medical Center.[6,7,8]

Balloon Catheter

Acceptance of TLA has been made possible by the unique physical properties of the balloon catheter. Made of polyethylene or polyvinyl chloride, it has a main inner catheter of 7F or 9F lumen size through which guide wires and contrast may be introduced. In addition a second independent outer lumen, with its own hub, contains a balloon near the tip of the catheter. There are several balloon diameters and lengths to accommodate various lesions in various sized arteries. (Figure 1)

The balloon itself is inflated with dilute contrast to a pre-determined cylindrical length and diameter. Any attempt to over-inflate the balloon results in balloon rupture rather than arterial rupture, provided that an appropriate size catheter has been selected for the lesion. The working pressure of the balloon is between three and seven atmospheres, and this pressure is monitored by interposing a pressure gauge between the dilating syringe and the balloon catheter.[9]

Mechanism of Action

Transluminal angioplasty produces a longitudinal fracture of the diseased intima in association with a moderate stretching of the regional media and adventitia. This controlled arterial injury results in a space between the intima and media through which the atheromatous material is redistributed. This results in a return of the arterial lumen to a normal diameter. Within 90 days, the injured intima is endothelialized to a smooth surface.[10]

Patient Selection

A team approach is required. Patients are seen jointly by the referring physician, vascular surgeon and angiographer. Following a complete history and physical examination, non-invasive Doppler studies are obtained to document the extent of occlusive vascular disease. Appropriate laboratory studies including bleeding and clotting parameters are also indicated. Using this data, a joint decision is then made placing the patients in one of three categories: (1) those who would benefit from surgical correction alone, (2) those who would be best suited to TLA alone and (3) those patients in whom a combined approach would be helpful.

Many patients who are candidates for TLA, have systemic manifestations of artherosclerosis including carotid, coronary and renal artery disease which have already produced clinical disease. Many of these patients are not candidates

From the Department of Diagnostic Radiology and the Department of Vascular Surgery, University of Kentucky Medical Center, 800 Rose Street, Lexington, KY 40536

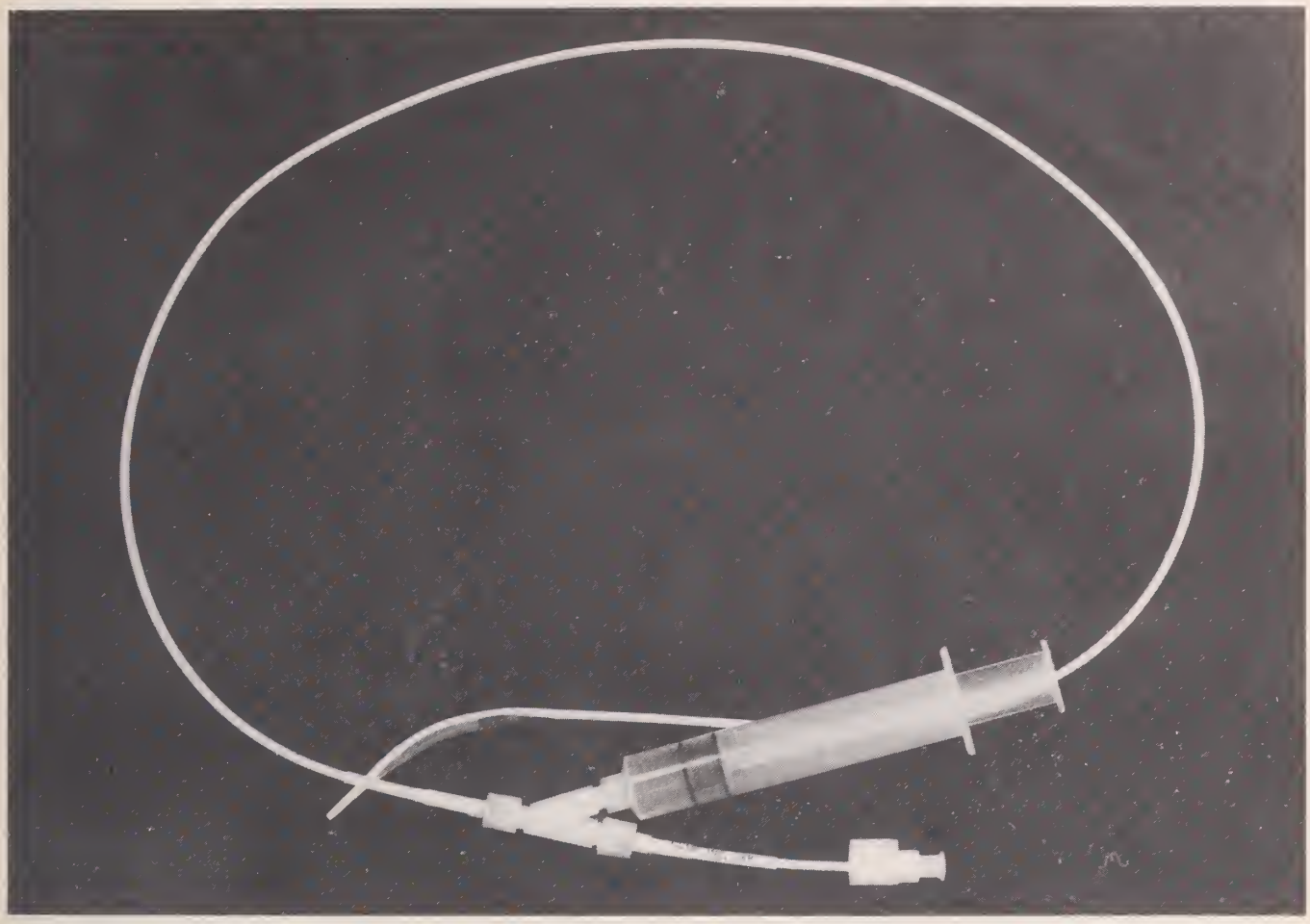


Fig. 1: Balloon dilatation catheter.

for major surgical procedures and general anesthesia. TLA is performed under local anesthesia, without major incisions, and the patient may, in some instances, be discharged on the day following the procedure.

Procedure

Candidates for transluminal angioplasty are placed on a program of antiplatelet aggregation therapy starting three days before TLA and extending for two weeks following the procedure. This regimen consists of Aspirin 650 mgm tid and Persantine 25 mgm bid.

The lesion to be dilated is identified by conventional diagnostic angiography, usually performed from the asymptomatic extremity. If a lesion suitable for TLA is found, a guide wire is placed across the stenotic or occluded lumen and the diagnostic catheter is exchanged for an appropriate sized balloon catheter. The balloon is placed across the lesion and dilatations are then performed until the inflated balloon is no longer deformed by the stenosis. A repeat angiogram confirms successful dilatation. Direct arterial pressures taken before and after TLA, both proximal and distal to a lesion provide immediate demonstration of amelioration of a pressure gradient. The entire procedure takes place under fluoroscopic observation. Heparinization is instituted immediately prior to TLA and is reversed prior to removal of the catheter at the end of the procedure. Doppler studies are obtained at 24 hours and at 30, 90 and 180 days. This permits non-invasive follow-up of patients. (Figure 2 and 3)

Passage of guide wires and catheters across stenotic or occluded vessels represents the most critical aspect of successful TLA. Impeccable angiographic technique is required in order to prevent subintimal dissection or perforation of

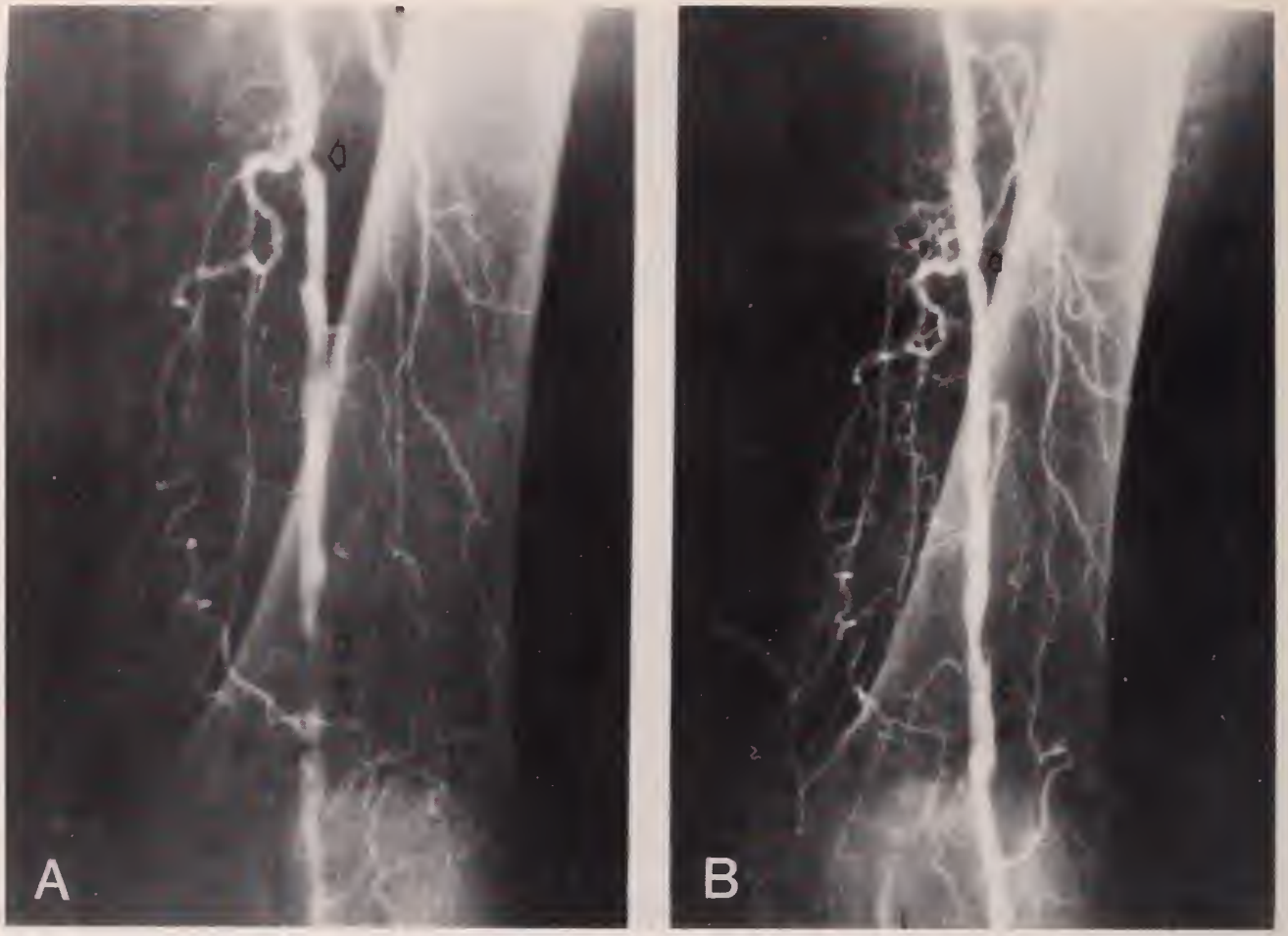


Fig. 2A: Pre-dilatation study of left superficial femoral artery showing two stenoses. Fig. 2B: Post angioplasty study reveals improved lumen caliber at both sites.

these highly diseased vessels. For this reason, TLA should be performed by angiographers who encounter these lesions on a day-to-day basis, and who have been specifically trained to perform TLA procedures.

Complications

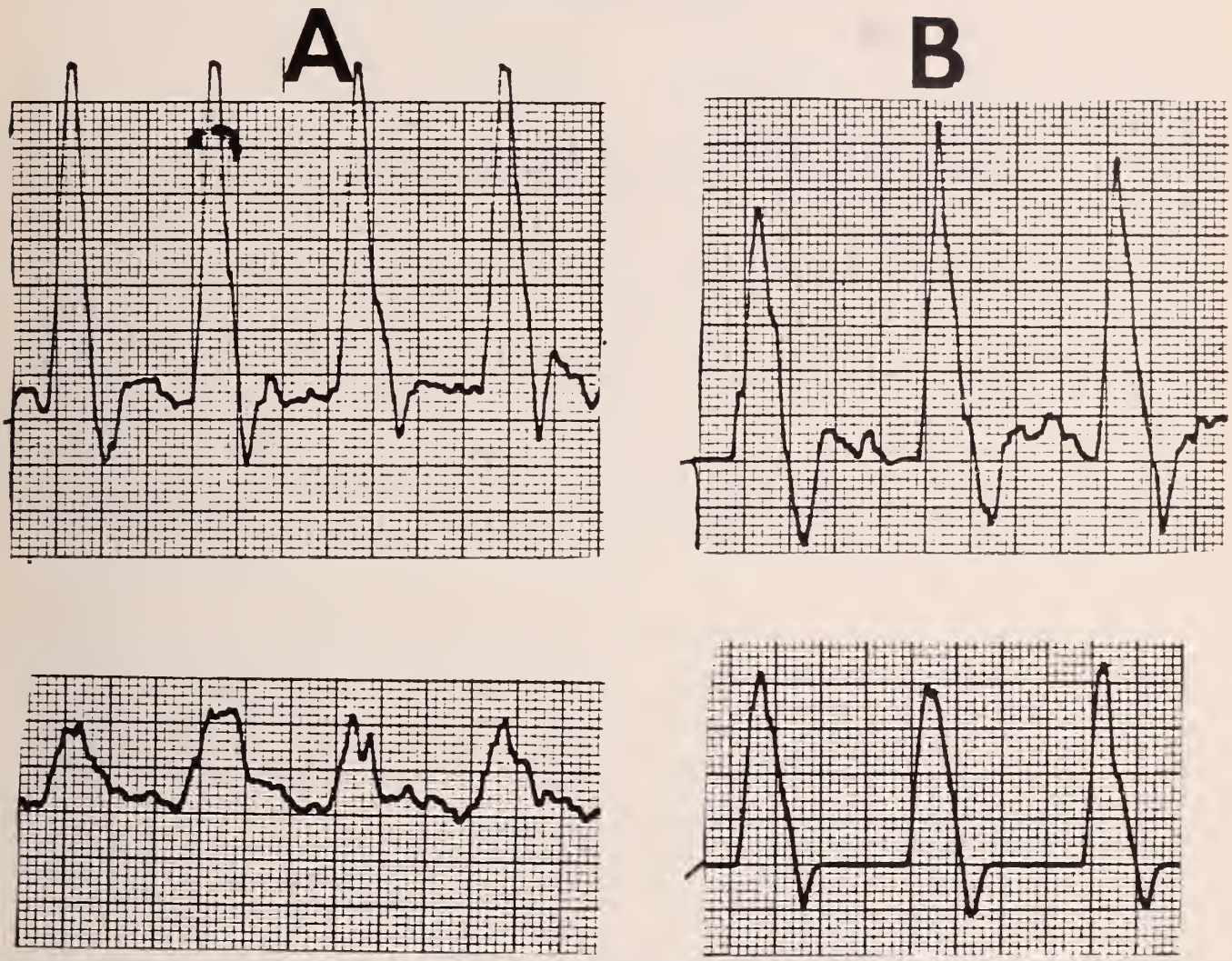
Beyond the problem of subintimal dissection (which require temporarily abandoning the procedure) the complications consist of local groin hematomas following the procedure, ruptured balloons and distal embolization of fresh clot or atheromatous material.[11]

In our experience, hematomas have been eliminated by reversing heparinization at the end of the procedure prior to removal of the catheter. Balloon rupture is becoming a rarity due to the introduction of polyethylene catheters. The reported incidence of downstream embolization during TLA is 5% of which only 1% require embolectomy. If TLA is unsuccessful, it may be repeated at another time. When properly performed, even if unsuccessful, it rarely interferes with a subsequent surgical procedure.

Discussion

The true evaluation of TLA requires comparison with the long term patency rates established by proven vascular surgical techniques. Because TLA is a recent innovation more time is necessary to document these patency rates. Results thus far are very encouraging. We have successfully dilated lesions involving iliac, superficial femoral popliteal, posterior tibial and renal arteries. Other institutions are investigating this technique in both coronary and carotid vessels.

TLA has been used successfully to dilate stenotic lesions in renal transplant patients and to



Fib. 3A: Pre-dilatation Doppler waveform demonstrates low amplitude femoral pulse, without backwave. Fig. 3B: Post-dilatation Doppler waveform reveals normal amplitude and restoration of backwave, 24 hours after dilatation.

dilate stenoses in access shunts for renal dialysis.[12,13,14]

In some instances a proximal iliac lesion may be dilated by TLA followed by a surgical femoropopliteal graft, again precluding the need for major abdominal surgery.

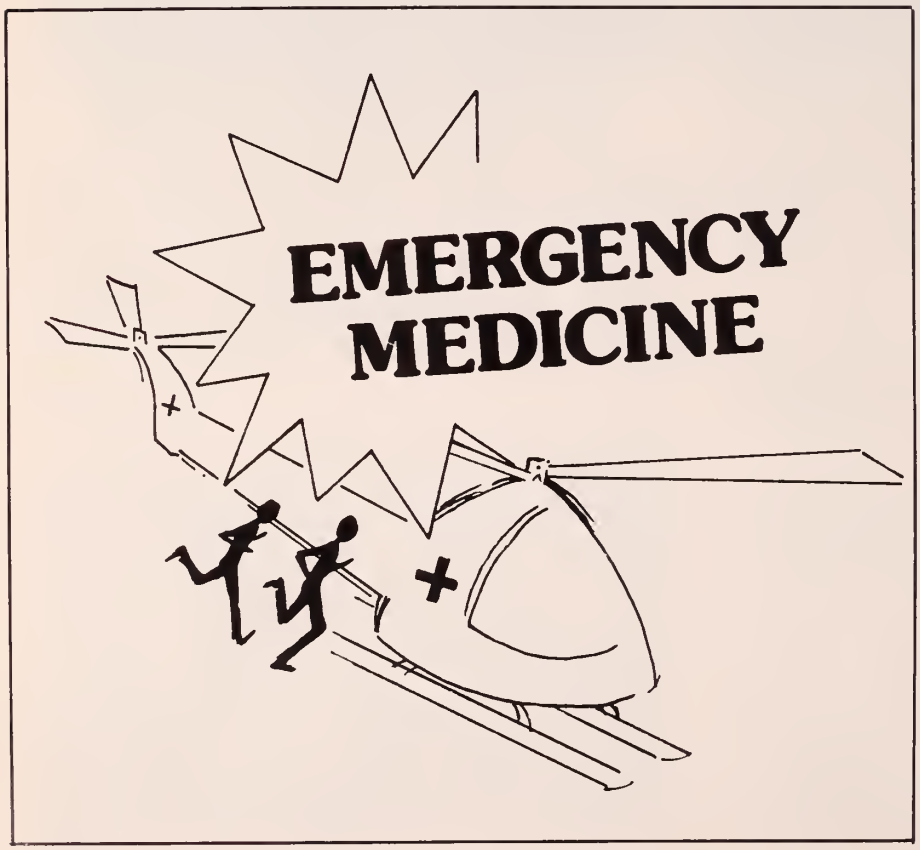
We have been most impressed with the use of TLA in patients who have been judged candidates for amputation. TLA often precluded the need for amputation even in patients with considerable tissue loss and rest pain.

Conclusions

Transluminal angioplasty (TLA) is a safe and cost-effective method of treating occlusive vascular disease in appropriately selected patients. The procedure is proving to be complementary to rather than competitive with surgical procedures. TLA will continue to play a principal role in the treatment of occlusive vascular disease.

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Improved Diabetic Control in an Ambulatory Group Setting

THOMAS JAMES III, M.D.

Blood sugar control may be important in the prevention of diabetic microvascular complications. Patient understanding of the major clinical issues of diabetes seems to be important in compliance with a therapeutic regiment. This paper describes an ambulatory group teaching program designed to improve patient compliance. In a 30-month period there were fewer hospitalizations, (two versus 11), among nine juvenile diabetics who participated in this program compared to nine who did not. The HbA_1c was lower among those who participated and tended to improve over time. Ambulatory teaching programs may prove to be a useful strategy for the care of juvenile diabetics.

LONG-term microvascular complications of diabetes are believed to be the result of persistent hyperglycemia.[1,2,3] Recently, new strategies for better blood glucose control have been advanced. Many patients are involved in home blood sugar determination by semiquantification mechanisms. New technology has allowed for development of closed-blood insulin delivery systems with portable pumps.

Nevertheless, patient acceptance and compliance often limits effective treatment of diabetes. The individual patient and family must understand the nature of juvenile diabetes and accept responsibility for control. A variety of group sessions have been designed to teach patients the nature of their illness.

This paper describes a model teaching program established with a group of juvenile onset diabetics who are members of an Health Maintenance Organization (HMO). The goals of this program were to improve patient and family compliance with self-care and to improve physician efficiency in the care of diabetic patients. Patient compliance was measured by examination of serum glycolysated hemoglobin (HbA_1C)* and measurement of short-term complications of diabetes.

From HealthCare of Louisville, Inc., 4545 Bishop Lane, Louisville, KY 40218

Method

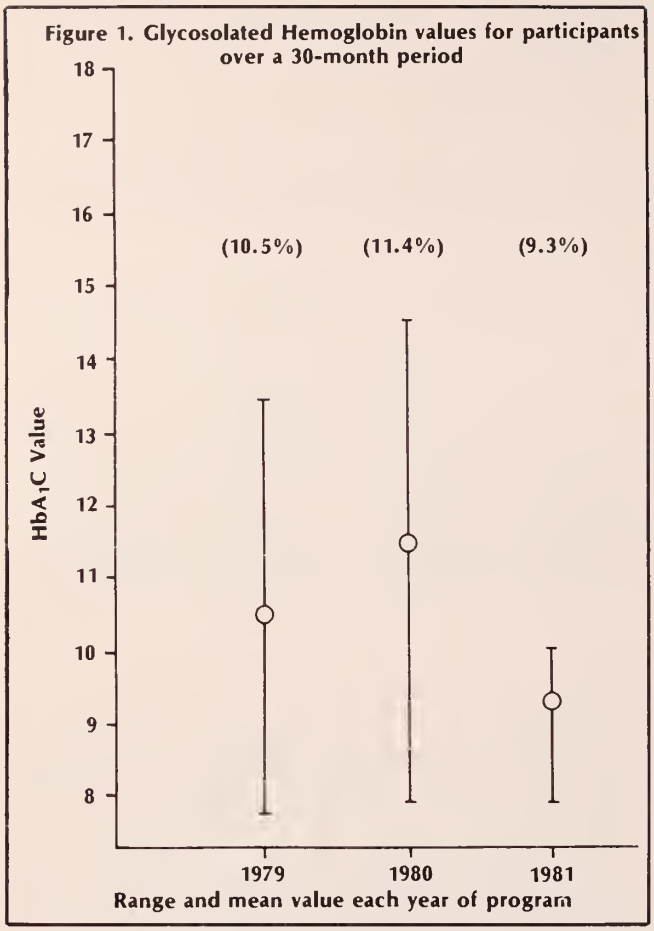
All juvenile onset diabetics who were members of a prepaid practice were identified and invited to participate in the HealthCare of Louisville Diabetes Club. Nine individuals became regular participants, and nine failed to attend more than two sessions. There were important medical and age differences between the two groups. (Table I.)

The Diabetes Club meets every six weeks on a Saturday morning. Participants come in for blood glucose and glycolysated hemoglobin determinations before the meetings begin. A 20-minute talk on some aspects of diabetes initiates each session. The meetings focus on nutrition, general diabetes care, pathophysiology or specific end-organ problems. Guest speakers pre-

TABLE 1
PATIENT PROFILE

	PARTICIPANTS	NON-PARTICIPANTS
Number	9	9
Mean age	16 years	23 years
Mean duration of diabetes range	6.6 years (1-20 years)	12.0 years (5-25 years)
30 month mean HbA_1C	10.8% (8.7-12.8%)	12.9% (9.7-17.4%)
Hospitalizations in 30 month period	2 (1 - Ketoacidosis) (1-Vitrectomy)	11 (all for Ketoacidosis)

*Normal value of HbA_1C is 6% to 9%.



sent many of the discussions. Patients and their families then engage in rather free-wheeling interchange between themselves and the physician-coordinator regarding specific problems in day-to-day care of diabetes. At the end of the meeting, the patients and their families receive the results of the blood glucoses drawn that day. Patients with problems may see the physician-coordinator individually at the end of the meeting.

In addition to the group sessions, the patients are seen annually by an ophthalmologist. Periodic evaluation of renal and neurological function became incorporated into some of the group sessions.

Results

The baseline glycolysated hemoglobins are given in Table I for both participants and nonparticipants. Over the course of the past two and one-half years their mean glycolysated hemoglobin values have fallen among the participants. (Figure 1). The average 1980 value for HbA_1C was elevated because of the entry of several new participants. The average duration of follow-up for participants has been 13 months.

The physician-coordinator spent 18 hours each year conducting the Diabetes Club. Seeing these patients individually would have required 27 hours of physician time.

Discussion

Hospital based patient teaching programs have been described for diabetic[4,5,6] and non-diabetic patients.[7,8,9] This paper describes an ongoing program for juvenile diabetics in an HMO setting. Those individuals who attended the program tended to lower their glycolysated hemoglobin (HbA_1C) values over time. This might suggest a better understanding of their diabetes and acceptance of the need to attain tighter control.

The nonparticipants should not be considered a control group since these individuals chose not to participate. This group did tend to have higher glycolysated hemoglobins. However, because they tend not to come in for appointments as frequently, glycolysated hemoglobin values over time were not available.

Several advantages to this group teaching approach became apparent. The relaxed atmosphere of a group tended to bring out discussion of both major and trivial subjects relevant to diabetes. Frequently, patients or their families raised issues the physician-coordinator would not have considered (eg, birthday parties for young diabetics). This may have contributed to improved patient compliance.

Another advantage was that the physician-coordinator was able to see most of the nine participants in two hours every six weeks. The amount of information disseminated in these sessions would have required much more physician time had these patients made individual appointments.

Although the Diabetes Club was formed in an HMO setting, its format could be easily adapted for use in a fee-for-service office. The group model for care of chronic illness may benefit many patients. Group care may be a useful strategy for some patients for improving compliance in the management of chronic conditions such as juvenile onset diabetes.

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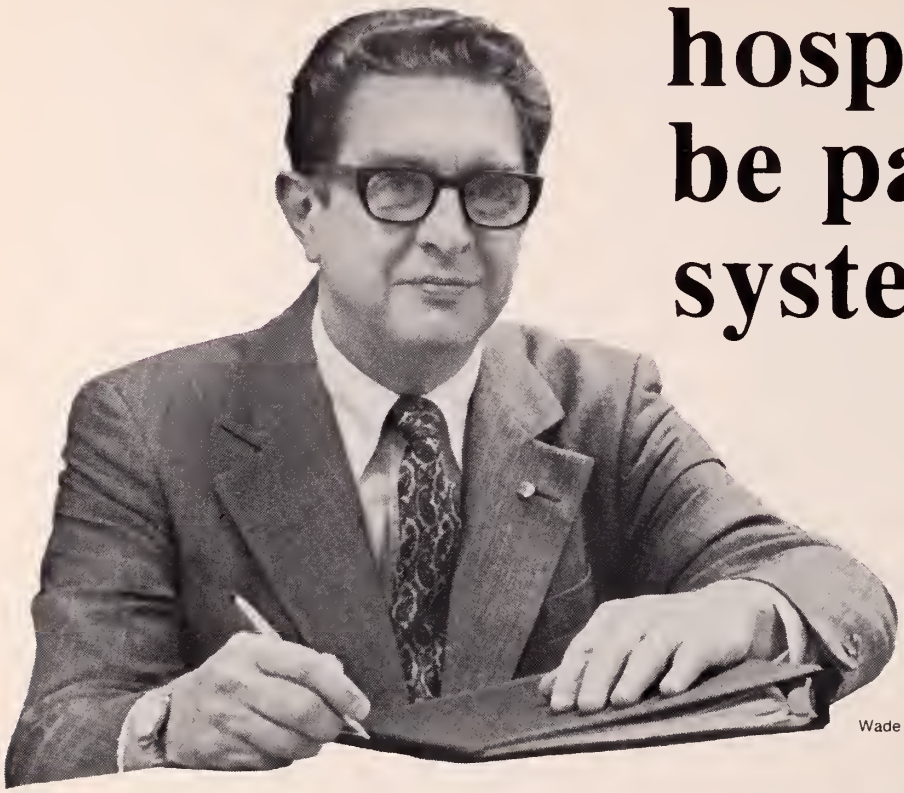
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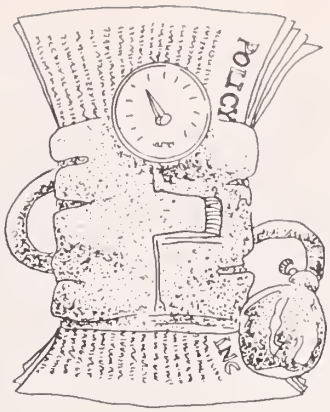
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Comparison of Anorectics

	Agent	Amine Classification	Half-life[a]	Variety of Dosage Form	Degree of CNS Effects
Low Abuse Potential	**Diethylpropion**	Tertiary	4-6 hrs.	25 mg tablet, 75 mg controlled-release tablet	Mild euphoria, mild stimulation
	Mazindol	Nonphenylethyl-amine	33-55 hrs.	1 & 2 mg tablet	Mild euphoria, mild stimulation
	Fenfluramine	Secondary	10-30 hrs.	20 mg tablet	Moderate sedation (mild to moderate depression, a side effect, is also sometimes designated as a CNS effect)
	Phentermine	Primary	19-24 hrs.	8 & 37.5 mg tablet, 8, 15 & 30 mg capsule 15 & 30 mg capsule (resin complex) 15 & 30 mg timed release capsule	Mild euphoria, moderate stimulation
High Abuse Potential	**Phenmetrazine**	Secondary	7-9 hrs.	25 mg tablet, 50 & 75 mg prolonged action tablet	Marked euphoria, marked stimulation
	Amphetamine	Primary	10-30 hrs.	Various	Marked euphoria, marked stimulation

[a]Delayed release characteristics of certain dosage forms must also be taken into account.

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Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors, (hypertensive crises may result).

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. When central nervous system active agents are used, consideration must always be given to the possibility of adverse interactions with alcohol. *Drug Dependence*. Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy*. Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children*. Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular*. Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System*. Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal*. Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic*. Urticaria, rash, ecchymosis, erythema. *Endocrine*. Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System*. Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous*. A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride). One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release. One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of June, 1980

Reference: 1. Abramson R, Garg M, Cioffari A, and Rotman PA, An Evaluation of Behavioral Techniques Reinforced with an Anorectic Drug in a Double-Blind Weight Loss Study. J Clin Psych 41:234-237, 1980.

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EDITORIAL

In February, Surgeon General C. Everett Koop released the annual report on smoking and health. The figures speak for themselves. Smoking is responsible for 430,000 deaths, $13 billion worth of health care expenses, and more than $25 billion in lost production and wages per year. "Cigarette smoking is clearly identified as the chief preventable cause of death in our society," reported Koop. The report did not mention the direct link of cigarette smoking as a risk factor in heart attack, so clearly demonstrated by the Framingham study.

The report also does not mention the more than $2 billion in tax revenue from the tobacco industry, nor does it address the number of jobs in this country directly related to the growth, processing and sale of tobacco.

Obviously, we in Kentucky have a special interest in tobacco since it is one of, if not the biggest, cash crop grown in the state.

Despite this I think the medical profession must speak out more clearly and forcefully against the health hazards of tobacco. To my knowledge the Kentucky Medical Association has never formally indicted tobacco as a health hazard or gone on record as opposing its consumption.

There are several things the individual doctor can do.

- Clearly preach the hazards of tobacco to the individual patient. This does surprisingly little good.
- Every public forum in which the doctor appears should be used as a platform against tobacco.
- The individual county societies should publicly oppose the consumption of tobacco.

Whether any of the above will persuade one person to stop smoking is uncertain. However, if we are persistent in our efforts and consistent in our opposition, in time, it should have an impact that will save lives and prevent the needless agony now endured by the thousands of victims of lung cancer and emphysema.

Paul C. Grider, Jr., M.D.

Watch for the 1982 KMA Membership Roster to be published in the July *Journal of the Kentucky Medical Association*

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Indications

Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:

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Tonsillitis and pharyngitis caused by Group A beta-hemalytic streptocacci

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Acute exocerbation of chronic branchitis caused by *H. influenzoe**

*Though clinical improvement hos been shawn, bacterialagic cures cannot be expected in all potients with chranic respiratory disease due to *H. influenzoe*.

SKIN AND SKIN STRUCTURES (integumentary) infectians caused by Group A beta-hemalytic streptocacci and staphylacacci, nonpenicillinase praducers.

URINARY TRACT INFECTIONS caused by *E. cali* and *P. mirabilis*. (This drug should nat be used in any *E. cali* and *P. mirabilis* infections other than urinary tract.)

NOTE: Perform cultures and susceptibility tests initially and during treatment ta monitor effectiveness af therapy and susceptibility of bacterio. Theropy may be instituted prior to results af sensitivity testing.

Contraindications Contraindicated in individuals with history af an allergic reactian ta penicillins.

Warnings Cyclacillin should only be prescribed for the indications listed herein.

Cyclacillin has less *in vitro* activity than other drugs of the ampicillin class. However, clinical trials demanstrated it is efficacious for recammended indications.

Serious and accasional fatal hypersensitivity (anaphylactoid) reactions have been reparted in patients an penicillin. Although anaphylaxis is mare frequent following parenteral use, it has accurred in patients an oral penicillins. These reactions are mare apt ta accur in individuals with history af sensitivity to multiple allergens. There are reparts of patients with history af penicillin hypersensitivity reactions who experienced severe hypersensitivity reactians when treated with a cephalosporin. Before penicillin therapy, carefully inquire abaut previous hypersensitivity reactians to penicillins, cephalasporins and other allergens. If allergic reaction occurs, discantinue drug and initiate appropriate therapy. Serious anaphylactaid reactians require immediate emergency treatment with epinephrine. Oxygen, I.V. steraids, airway management, including intubation, should alsa be administered as indicated.

Precautions Pralonged use af antibiatics may pramate avergrawth af nansusceptible arganisms. If superinfectian accurs, take apprapriate measures.

PREGNANCY: Pregnancy Categary B. Repraductian studies perfarmed in mice and rats at dases up ta 10 times the human dase revealed na evidence af impaired fertility ar harm ta the fetus due ta cyclacillin. There are, hawever, na adequate and well-cantralled studies in pregnant wamen. Because animal repraductian studies are nat always predictive af human response, use this drug during pregnancy anly if clearly needed.

NURSING MOTHERS: It is nat knawn whether this drug is excreted in human milk. Because many drugs are, exercise cautian when cyclacillin is given ta a nursing waman.

Adverse Reactions Oral cyclacillin is generally well taleroted. As with ather penicillins, untaward sensitivity reactians are likely, particularly in those who previously demanstrated penicillin hypersensitivity ar with history af allergy, asthma, hay fever, ar urticaria. Adverse reactians reported with cyclacillin: diarrhea (in appraximately 1 aut af 20 patients treated), nausea and vamiting (in approximately 1 in 50), and skin rash (in appraximately 1 in 60). Isalated instances af headache, dizziness, abdaminal pain, vaginitis, and urticaria have been reparted. (See WARNINGS) Other less frequent adverse reactians which may accur and are reported with other penicillins are anemia, thrombacytopenia, thrambacytapenic purpura, leukapenia, neutrapenia and easinaphilia. These reactians are usually reversible an discantinuatian af therapy.

As with other semisynthetic penicillins, SGOT elevations have been reported.

As with antibiotic therapy generally, continue treatment at least 48 to 72 hours after patient becames asymptamatic ar until bacterial eradicatian is evidenced. In Graup A beta-hemalytic streptococcal infections, at least 10 days' treatment is recammended ta guard against risk af rheumatic fever or glomerulanephritis. In chranic urinary tract infection, frequent bacterialagic and clinical appraisal is necessary during therapy and passibly far several manths after. Persistent infectian may require treatment far several weeks.

Cyclacillin is not indicated in children under 2 months af age.

Patients with Renal Failure Cyclacillin may be safely administered ta patients with reduced renal function. Due ta pralanged serum half-life, patients with variaus degrees af renal impairment may require change in dasage level (see DOSAGE AND ADMINISTRATION in package insert).

Dosage (Give in equally spaced dases)

INFECTION	ADULTS	CHILDREN*
Respiratory Tract		
Tonsillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg t.i.d. body weight > 20 kg (44 lbs) 250 mg t.i.d.
Branchitis and Pneumonia		
Mild ar Moderate Infections	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chranic Infectians	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg ta 500 mg q.i.d.†	50 ta 100 mg/kg/day t.i.d.†
Skin & Skin Structures	250 mg ta 500 mg q.i.d.†	50 to 100 mg/kg/day†
Urinary Tract	500 mg q.i.d.	100 mg/kg/day

*Dosage should nat result in a dase higher than that far adults.
†depending an severity

How Supplied Tablets 250 mg and 500 mg in bottles af 100. Oral Suspensian 125 mg and 250 mg per 5 ml in bottles ta make 100 ml and 200 ml af Suspensian.

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Compared to amoxicillin

Faster peak. Fewer problems.

. . . in infants and children

Cyclapen®-W (cyclacillin) produces twice the peak serum concentration* (15.6 mcg/ml versus 7.3 mcg/ml) in half the time (30 minutes versus 60 minutes).[1]

Cyclapen®-W is just as effective in otitis media and streptococcal tonsillopharyngitis†.[2]

Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

CYCLAPEN®-W

(cyclacillin) Tablets/Suspension

Rapid onset of action with fewer side effects.



*Rapidly excreted unchanged in urine. Clinical efficacy may not always correlate with blood levels.

†Due to susceptible organisms.

1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.

2. Multicenter trials. Data to be published.

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See important information on adjoining column.

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ALL FOR ONE ONE FOR ALL



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Alexandre Dumas'
The Three Musketeers
and D'Artagnan

ONE FOR ALL – One tablet treats pinworm in any patient, regardless of age or body weight.* Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

*Contraindicated in pregnant women and in persons who have shown hypersensitivity to the drug.

VERMOX® CHEWABLE TABLETS
(mebendazole)

JANSSEN PHARMACEUTICA

The #1 anthelmintic for pinworms and many other worm infestations

Please see complete Prescribing Information on adjacent page.

VERMOX® CHEWABLE TABLETS (mebendazole)

Rx

Vermox Tabs #4
Sig 1 tab each family member



DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

Committed to research...
because so much remains to be done.

Tableted by Janssen Pharmaceutica, Beerse, Belgium for

JANSSEN PHARMACEUTICA
New Brunswick, New Jersey 08903

JPI-282

Do you know a physician with a drinking or drug problem, or some other chronic, impairing condition? Is he potentially dangerous to himself, his patients or his family? Help him out. Contact the KMA Committee on Physicians' Health at the KMA Office: 502-459-9790. Or call one of the committee members listed below.

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Each Tablet Contains:

Pentylenetetrazol	25.0 mg
Pheniramine maleate	12.5 mg
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Clinically proven actions

- Antihistaminic
- Cerebral stimulant
- Vasodilator

Few side effects

- Vasodilation occasionally causes facial flushing which can be minimized by recommending that Ru-Vert® be taken following meals or with food.

Dosage

- One or two tablets three times a day

Please see next page for a summary of prescribing information

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Pioneers in medicine for the family



BOOK REVIEWS

Stephen Z. Smith, M.D.
Assistant Scientific Editor

Current Medical Diagnosis & Treatment - 1982

Edited by Marcus A. Krupp, M.D. and Milton J. Chatton, M.D.
Copyright 1982, Lange Medical Publications, 1113 pages

This is the updated and emphatically current edition of the popular paperback book. The editors have remained eclectic, embracing the full breadth of medical practice. Though now its girth has grown to greater than 1100 pages, this book remains deep in detail of each of its segments.

Initially general symptoms are described, emphasizing the physical examination and correlating variations in anatomy and function with the advent of disease. Each of these parts is written by those recognized as expert in their field, but despite this ecumenical approach continuity is maintained. After these initially anatomically organized chapters are completed, four sections describe infections from bacteria, viruses, helminths, protozoa, spirochetes, fungi and rickettsiae. Somehow no illustrations are used, but many useful detailed tables are included. Reluctantly detailed therapies are given—even with precise dosages—giving this section a handbook quality.

Endocrinopathy with its sometimes abstruse physiochemistry is presented with great clarity. Practitioners of medicine will feel comfortable with this practical introduction to endocrine disease.

Concluding chapters on the effects of radiation and physical agents, and the multidiscipline oncology world are rejuvenated with a distillation of recent literature. In fact, the bibliography reads like a "Who's Who" of the acceptable medical thinking in each field.

Like its predecessors, the 1982 edition is richly and completely indexed. An appendix has a smattering of medical minutia, even the "controversial metric system."

For all of us, reading through or perusal of this book is a worthwhile experience.

Politics: That Dirty Business

The preceding title describes a feeling that probably everyone subconsciously holds if they give any cogent thought to the way our country and our state are run. Any human endeavor, though, is as elevated or mundane as the individuals involved, so politics is only as dirty as the people who participate in it.

Just as with all groups, politicians and those involved in Legislatures do fall in a bell-shaped curve spectrum; there are both affirmative and negative deviations, with most assuming a middle position.

Although it sounds self-serving, KMA's legislative efforts have to be categorized as falling into the far right side of the bell-shaped curve. There is no question that politics, by definition, is an exercise in negotiating and even brokering, to some extent. However, KMA's approach is, and always has been, one of a reasoned, straightforward discussion of issues on their merits.

KMA's legislative efforts have a strong, credible reputation with Legislators, state agencies and other interest groups. Disregarding the fact that KMA is viewed as a special interest lobby, our legislative representation is carried forward honestly and with integrity. When dealing with any group of people, very often half-truths and omissions become a motivational imperative. In the long run, though, mendacity can only serve to harm. The converse of this describes KMA's approach.

In tandem with dedicated, constant and talented efforts on the part of KMA legislative staff and officers, this commitment to veracity has well established KMA's organizational credibility and results in one of the most effective legislative action groups present in the Kentucky General Assembly.

It's a near impossibility to appreciate the legislative process without having been involved through a session. Please accept the word of the author that the gratitude of the membership is most keenly due to KMA's representatives in Frankfort. Their conduct and accomplishments do them and our profession great credit.

Dwight L. Blackburn, M.D.
KMA President-Elect

MEDICAL STUDENT SECTION

Peeking Ahead

A major focus of the upcoming AMA-MSS convention in June will be the funding for student loans. Much has been made of this issue, and we must recognize that many other issues, some of more importance, need to also be confronted.

We must not forget about indigent care. Many proposals are forthcoming about how to fund the medical needs of indigent patients. Proposals for capitation, satellite clinics, and other health care networks have been made, and we need to examine each of these issues very closely, for we are the ones whose practices will be greatly affected by these proposals. Our future as physicians, as well as the future health care of this country, will depend on how we fit into these systems.

Next, new technology has raised both educational and ethical concerns. We will be the physicians using these new discoveries, so we must concern ourselves about the use and impact of this technology on medical care.

The extension of hospital corporations has triggered an era of "business medicine." All of us will be faced with hospital competition for services, free standing emergency clinics and other offices run by hospitals where physicians are just employees, and other extensions into private practice. We cannot bury our heads in the sand and not be involved in these movements. We need to make decisions on these movements, and stand for our own ways of practicing medicine.

Please concern yourselves with these very important issues. Medical education funding is indeed a vital issue to students, but we must also think about our future as physicians.

Steve Wilson

KMA Medical Student Section

President
Steve Wilson, University of Louisville

Chairman
Gary Browning, University of Kentucky

Secretary/Treasurer
Barbara Canida, University of Kentucky

At-large Delegates
University of Louisville

Beth Best
Bruce Burton
Claude (Rusty) Cummins
Diane Schneider

University of Kentucky

James Brennan
Barbara Canida
Keith Mornung
Nick Winer

Editorial Writer
Steve Wilson

Any student contributions to this section of the KMA Journal will be gladly accepted. Please send any articles, letters, cartoons, criticisms, etc. to:

Steve Wilson
9015 Old Whipps Mill Rd.
Louisville, KY 40222

These contributions must be sent two months in advance of publication date.

Medical Student Section CONSTITUTION

The following is the proposed Constitution and Bylaws of the KMA Medical Student Section. This document is subject to the approval of the KMA House of Delegates at its September meeting.

Article I. Name of Organization: The name of this organization shall be the Medical Student Section of the Kentucky Medical Association (MSS).

Article II. Purpose: The purpose of this organization shall be to encourage and support the active involvement and participation of medical students in the Kentucky Medical Association and to provide a forum for discussion of student opinions and ideas with organized medicine. The MSS will also support the purposes of the KMA as stated in its Constitution.

Article III. Composition & Meetings: The Medical Student Section shall be composed of KMA student members. Students enrolled in Kentucky medical universities and residents of Kentucky attending an out-of-state school shall be eligible for membership. Only members of the Medical Student Section of the KMA will be eligible to vote and hold office in the MSS.

The Medical Student Section shall hold an Annual Meeting each year immediately preceding the Annual Meeting of the Kentucky Medical Association. A special meeting of

the MSS may be called when two or more members of the Governing Council so request.

Article IV. Officers: Section 1. The officers of this association shall be the President, Chairman and Secretary/Treasurer of the Governing Council.

Section 2. The eligibility, duties and terms of officers of the Section shall be as prescribed in the Bylaws.

Section 3. The officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the Governing Council at its first regular meeting immediately following the elections.

Article V. Governing Council: There shall be a Governing Council of the Medical Student Section consisting of five representatives from the University of Louisville and five from the University of Kentucky medical schools. Each school will have the responsibility for the election of a student delegate to the KMA, student delegate to the AMA-SBS and three members at large. The five members from each school will meet immediately following the elections and elect a President and Chairman of the Governing Council. Elections of these individuals will be held in May at each university.

The Governing Council shall have the authority to conduct all business of the MSS and to prepare resolutions and reports during the interim periods between the Annual Meetings of the Medical Student Section.

The Governing Council shall submit nominations for student committee members to the KMA Board of Trustees at least 60 days prior to the September Annual Meeting of the KMA.

Article VI. Funds & Expenses: The funds for meeting the expenses of the Section by such methods and suggested sources as may be selected by the Governing Council. Assistance from the KMA will be augmented by the collection of dues and/or assessments as deemed necessary and authorized by the Governing Council. The Secretary/Treasurer shall be responsible for all financial affairs of the KMA-MSS.

Article VII. Referendum: The student membership of the MSS by written petition, signed by not less than 10% of the active student medical membership may obtain a referendum on any question pending before the Governing Council, or any policy adopted by the Committee. The Governing Council, upon receipt of the petition shall cause the question to be submitted to the active student membership and if a majority of the active student members shall seek its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding on the Medical Student Section.

Article VIII. Amendments: The Medical Student Section may amend any article of this Constitution by two-thirds vote of its active student membership at the regular Annual Meetings of the Section, provided that such amendment shall have been reviewed by the active student membership at each university sixty days prior to the Annual Meeting.

Article IX. Definitions: Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

a. "Annual Meeting," means the Annual one-day meeting of the MSS.

b. "Governing Council," means the jointly elected body that has the authority to handle all business of the Section.

c. "Special Session," means a special called meeting of the general membership of the MSS.

BYLAWS

Chapter I. MEMBERSHIP

Section 1. All medical student members of the Kentucky Medical Association shall be considered active members of the Medical Student Section and shall have full rights and privileges, including the right to vote, hold office in the Medical Student Section and sit on the appropriate councils and committees of the KMA when appointed.

Chapter II. ANNUAL & SPECIAL MEETINGS

Section 1. The Section shall hold its annual and special meetings at such times and places that may be determined by the Governing Council.

Section 2. The Annual Meeting shall consist of a general meeting of the active student membership of the MSS and will be held prior to the September Annual Meeting of the KMA.

Section 3. Each student member in attendance at any meeting shall register attendance and obtain verification by references to the roster of the Section, the student member shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No student member shall take part in any of the proceedings of any meeting until they have complied with the provisions of this Section.

Chapter III. GOVERNING COUNCIL

Section 1. The Governing Council shall be the executive body of the MSS and shall exercise the powers conferred upon by the medical student members of the MSS, and the Constitution and Bylaws. The Governing Council shall consist of the five representatives from each of the medical schools in the state. This includes the delegate to the AMA-SBS from each school, the delegate to the KMA from each school and the three at large members from each school. The Governing Council shall elect a President, Chairman of the Governing Council and from itself. A

majority of the council—shall be deemed as three representatives from each school for a total of six and shall constitute a quorum for transaction of all business. Between sessions of the Governing Council the student representatives shall be responsible for the dissemination of information to the student membership and the collection and transmittal of concerns and requests to the Governing Council when it next meets.

Section 2. Recall: Any member of the Governing Council can be recalled by three-fourths vote of the Medical Student Section voting members of the specific university attending a general or special meeting of the MSS. The person subject to recall shall be notified of the charges against them at least 10 days in advance of the hearing and given the opportunity to speak before the assemblage. A complaint for removal against a member of the Governing Council must be presented in writing to the Chairperson and must be signed by at least 5% of the active membership at that particular university where the contested position is. Considerations for removal shall be decided by those voting members present at the called meeting and at least three-fourths vote is needed for removal. Elections for vacancies in the Governing Council shall be held within 30 days of the time of the vacancy at the appropriate school or where the vacancy occures.

Section 3. Duties of AMA-SBS Delegate: The delegate will have the authority to introduce resolutions to the AMA-SBS in accordance with the Constitution and Bylaws of the KMA & MSS. The delegate will coordinate activities with their respective school, the Governing Council of the MSS and the Board of Trustees of the KMA as they relate to the business of the AMA-SBS.

Section 4. Duties of KMA Delegate: The delegate will have the authority to introduce resolutions as directed by the membership and Governing Council of the Medical Student Section, and represent their particular school before the KMA House of Delegates.

Section 5. Duties of Alternate Delegates: The Governing Council will have the authority to designate alternate delegates from the three at large members from their perspective school to fill a vacancy from their school's as directed by availability and need. Position or vacancies will be filled by a representative from the appropriate school as to maintain equal representation.

Alternate delegates to the AMA-SBS or KMA shall assume the respective duties of the delegate in the event of their absence for whatever reason.

Chapter IV. ELECTION OF OFFICERS & STUDENT REPRESENTATIVES

Section 1. The University of Louisville's KMA medical student membership and the University of Kentucky's KMA medical student membership shall elect from the active student membership population five representatives from each school. Of the five positions elected from each school, one individual should be designated as the schools delegate to the AMA-SBS and another individual should be designated as the delegate to the KMA. The other three representatives elected at large shall serve as alternate delegates as deemed by the Governing Council based on need and scheduling. The five representatives from each school shall serve for one year terms and may be elected to successive terms. All active student members shall be eligible to be elected as a representative for their school.

Section 2. The President, Chairperson and Secretary/Treasurer of the Governing Council shall be elected by the Governing Council at the first meeting of the new council.

Section 3. The student representatives from each of their perspective schools shall act as the nominating committee in order to verify the eligibility and willingness of each candidate to serve. The committee shall accept and post for information all eligible and willing candidates for the five representatives to be elected. The information shall be posted a least two weeks prior to the election of the representatives. Each school shall have the discretionary authority to determine how these five representatives shall be elected.

Section 4. The student delegate to the KMA will have the responsibility to notify the KMA of their five new representatives for their school. After the election of the President, Chairperson, and the Secretary/Treasurer, the President shall inform the KMA of the officers elected.

Chapter V. DUTIES OF OFFICERS

Section 1. The President shall preside at all special and Annual Meeting sessions of the Section and shall appoint all committees not otherwise provided for. He shall deliver an annual address at the annual session of the Medical Student Section and make a special report on behalf of the MSS before the KMA House of Delegates at their Annual Meeting in September. The President shall represent the Section at all functions and shall maintain liaison between the MSS and the Board of Trustees of the KMA.

Section 2. Chairperson of the Governing Council. The Chairperson of the Governing Council shall preside over each meeting of the Governing Council and shall perform such other duties as necessary to carry out the dictates of the Governing Council. The Chairperson shall appoint all committees of the

Medical Student Section with the approval of the Governing Council. The Chairperson shall assume the duties of the President in his absence and shall perform such other duties as custom and parliamentary usage may require at the Annual Meeting of the Section.

Section 3. Duties of At-Large Representatives. The at-large representatives will have the responsibility of keeping student mem-membership informed and act as a reciprocating feedback to the Governing Council on policy and programs. The At-Large Representaatives will also have the responsibility of serving in the capacity as alternate delegate to the AMA-SBS or KMA when so designated by the Governing Council.

Section 4. Duties of Secretary/ Treasurer. The Secretary/Treasurer shall keep the records of all KMA-MSS Meetings, and also conduct the financial affairs of the KMA-MSS. The Secretary/Treasurer shall also make a report to the Annual Meeting of the KMA-MSS.

Chapter VI. COMMITTEES & COMMISSIONS

Section 1. The Governing Council of the MSS shall have the authority from time to time to appoint fixed duties of and abolish such standing committees and commissions as it deems necessary or desirable to assist the Medical Student Section in its fields of business.

Section 2. No committee or commission shall have the power or authority to fix or determine Medical Student Section policy or commit the Section to any course of action, such powers being expressly reserved to the Governing Council.

Chapter VII. AMENDMENTS

Section 1. These Bylaws may be amended at a general meeting of the membership of the Medical Student Section provided: (1) The amendment proposed is presented in writing to the Governing Council 60 days prior to the Session and that the amendment is reviewed by the medical student membership prior to the Session. (2) An amendment to the policies will be introduced at the Session of the Annual Meeting of the MSS and will be debated by those members in attendance. (3) For an amendment to take effect, approval of three-fourths of the active medical student membership in attendance will be needed for its implementation.

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-5]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor* (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest* tablets but not with Tes-Tape* (Glucose Enzymatic Test Strip, USP, Lilly)

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor* (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [100281R]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[6]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

References

1. Antimicrob. Agents Chemother., *8*:91, 1975
2. Antimicrob. Agents Chemother., *11*:470, 1977.
3. Antimicrob. Agents Chemother., *13*:584, 1978
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5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978
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7. Data on file, Eli Lilly and Company
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

200086

LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

Breast Cancer and Informed Consent

Treatment of cancer of the breast raises special issues of personal image and psychological consideration. The treatment itself is both highly visible and highly controversial. There is extensive lay press attention, much of it irresponsible and confusing to the patient before she ever comes to the physician's office. The patient must therefore possess sufficient sound information presented by the physician to feel comfortable that she has made the best possible choice for herself. Methods of this communication are discussed.

The now famous comment of Justice Benjamin Cardozo in Schloendorff vs. Society of New York Hospital has subsequently become the legal basis of informed consent. "Every human being of adult years and sound mind has the right to determine what shall be done with their own body."[1] This was said in 1914, so the issue of patient participation in decision making and the associated informed consent is not a new issue, but is certainly a current issue. It is current because of the general rebellion against authoritarian paternalism of any kind, especially that of the physician. This is a reflection of an overall atmosphere of individual autonomy present in our society today particularly among women, minority groups, and other groups wishing to express their own individuality.

This tends to raise very special issues in relationship to the management of breast cancer. We are dealing usually with a male physician and a female facing the likelihood of visible mutilation, one not usually associated with the treatment of other common malignancies. Extensive lay press publicity of the numerous therapeutic modalities, of psychological issues, and personal image considerations have made informed consent paramount in breast cancer when compared with less visible illnesses with more standardized treatments. Frequently the lay press has failed to recognize the heterogenecity of the disease and tend to speak of breast cancer as a single entity.

Treatment of breast cancer is highly visible, and whatever the results, they are going to be apparent to the patient every morning in the mirror. She therefore needs to be aware of alternatives and satisfied she had made the best possible choice.

The total gamut of modalities in use varies from routine operative procedures through obvious therapeutic research. Large national and regional protocols are utilized and randomized clinical trials are prevalent. The choice of treatment in cancer of the breast cannot be considered standardized at any point along the course and many areas remain highly controversial even among experts. Often the therapeutic may blend almost imperceptively into the experimental without foreknowledge of the patient and occasionally not even recognition by the physician.

The purpose of conveying information to the patient is not just to make her aware of the myriad of possible choices actually faced by the treating physician but to help her decide what is best for her. She should not be left without guidance in a sea of uncertainties and nonuseable facts. The physician is not only to disclose but is also to advise and recommend and even occasionally use "acceptable persuasion."[2] Usually the patient is going to rely on the judgement and advice of her physician.

In transmitting the information the physician must learn to communicate in terms that the patient can understand. We tend to think that almost everyone will understand the term mastectomy, but it is surprising how many persons do not know exactly what that entails. Whenever any procedure is going to effect sexual activity or personal image, extreme care must be exercised to make sure the patient is fully aware of the consequences.

The physician must also be somewhat flexible, not necessarily lending himself to foolishness, but still

recognizing that the patient may have a different set of values, a different heritage, and may lend more weight to factors considered inconsequential by the physician. Occasionally the value systems of the patient and physician are so different as to be irreconcilable. In this situation, it is the physician's duty to refer the patient to a reputable colleague who may have a value structure more closely related to that of the patient's.

We often wonder how much detail, what complications, and what alternatives should be explained, hoping to legally protect and morally fulfill our informed consent obligation. Without repeating the extensive legal review of the subject, recently published by Leslie Miller,[3,4,5,6] a few guidelines can be extracted.

First of all, the disclosure is meant to be informative and useful, not encyclopedic. The communication must be made by the physician in charge, not by the nurse, secretary, the house officer, or some other surrogate, and the communication should be completely comprehensible by the patient. Skip all the big words. Exactly what information is to be transmitted has yet to be definitively determined and it is well recognized that lists of complications and an overly legalistic approach tends to intimidate and decrease rather than increase physician/patient rapport.

Briefly, anything which one would consider to be of serious nature is to be mentioned: death, blindness, loss of sexual function, cosmetic or functional mutilation, things considered serious by the average person. When one undertakes major endocrine ablation as an extreme example, a detailed disclosure is mandatory. Though the chances of a serious complication occurring might be remote, because of its serious nature it should be discussed.

In addition, include things that are likely to occur. Things which occur frequently enough that even though they are minor or even reversible, if they are to be expected they should be included in the discussion. None of us likes therapeutic surprises and neither do patients. The classic example of this is loss of hair during chemotherapy. Though the hair growth usually returns following cessation of the agent, the patient should be aware of the likelihood.

Discuss areas considered serious, discuss things likely to happen, present alternatives and likely outcomes. Most of all allow the patient to ask and have answered all her questions. Inclusion of the spouse is advisable except under the most unusual circumstances.

The institution of the two stage biopsy has helped with these discussions by eliminating many of the "ifs" and "maybes." Patients tend to pay much closer attention in discussions concerning definitive treatment when cancer has become the histiological reality rather than a theoretical possibility.

Documentation is the best form of protection for all involved. Don't depend on your memory or the patients.

It is well known that patients tend to recall information that seems to favorably reflect on the decisions they have made and sublimate information that reflects unfavorably. This poor recall of potential adversity is wholly consistent with the theory of individual denial of unpleasant realities. The explanation of risk, adverse outcome, and problems that would reflect unfavorably on the decision are forgotten. The physician then must have documentation in the chart. It should be brief, but informative, including notes of explanations given and discussions with the patient. Consent forms in no way represent informed consent.

All of these educational efforts on the part of the physician are as beneficial for the physician as they are for the patient. The patient has freedom of choice and with that freedom of choice comes commensurate responsibility. "Patients are learning that they must accept ultimate responsibility for whatever course of treatment they undergo and they cannot blame the physician when the risks they themselves decide to take become realities."[7]

References **1.** Schloendorff vs. Society of New York Hospital 105 NE 92, 93 (NY 1914). **2.** Hirsh Bernard D, The Medicolegal Framework for Clinical Research in Medicine, *Ann NY Acad of Sci* Vol. 169, Page 309-315, 1970. **3.** Miller Leslie J, Informed Consent I, *JAMA* Vol. 244, No. 18, Page 2100-2103, Nov. 7, 1980. **4.** Miller Leslie J, Informed Consent II, *JAMA* Vol. 244, No. 20, Page 2347-2350, Nov. 21, 1980. **5.** Miller Leslie J, Informed Consent III, *JAMA* Vol. 244, No. 22, Page 2556-2558, Dec, 5, 1980. **6.** Miller Leslie J, Informed Consent IV, *JAMA* Vol. 244, No. 23, Page 2661-2662, Dec. 12, 1980. **7.** Donagan Alan, Informed Consent in Therapy and Experimentation, *J of Med and Phil,* Vol. 2 No. 4, Page 318, Dec. 1977.

Carl W. Liebert, Jr., M.D.
University of Louisville
School of Medicine
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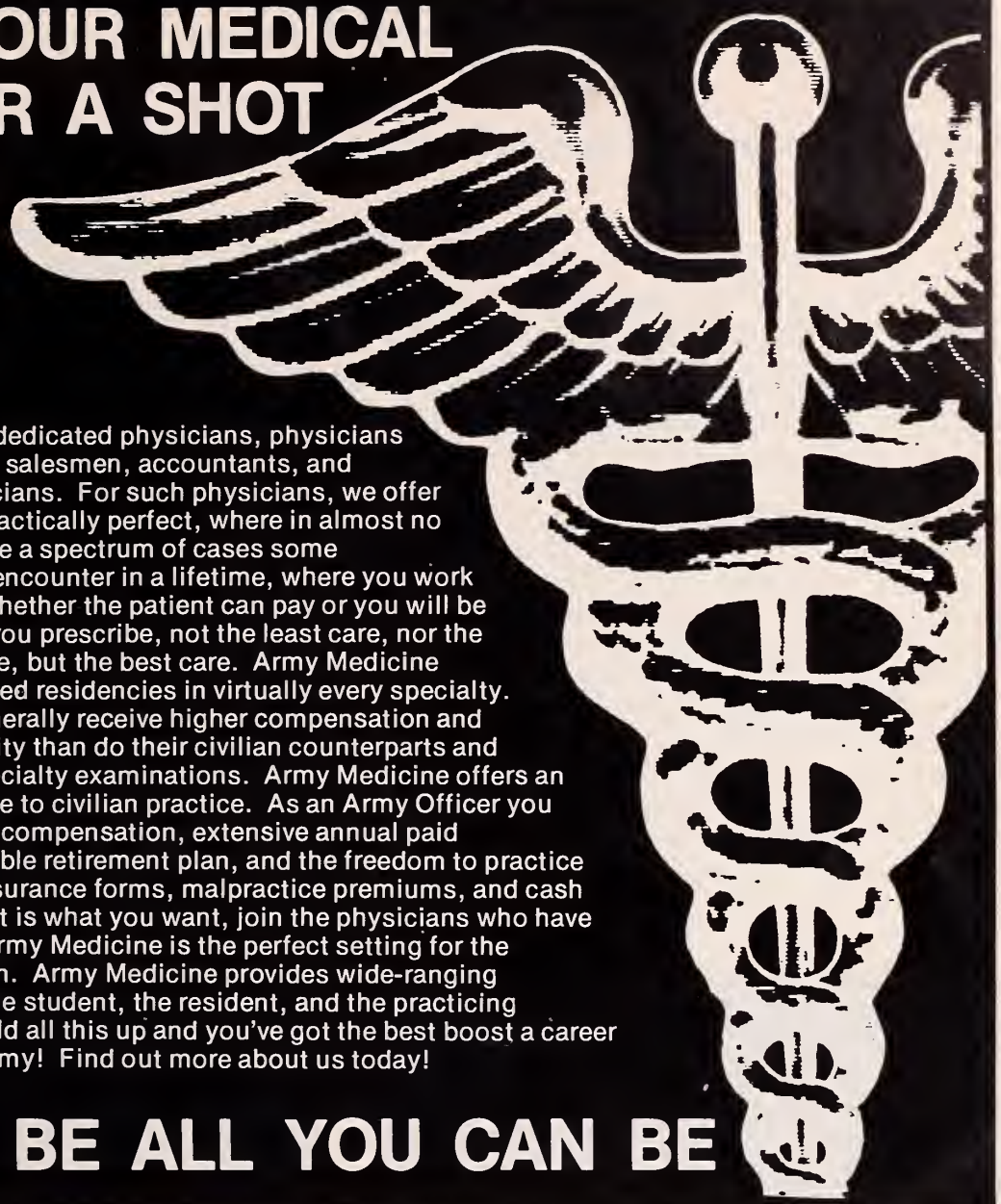
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J-9043-4 July 1981

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Medical Specialty _____ Date Passed ECFMG _____

ASSOCIATION NEWS

Guest Speakers Highlight Emergency Medical Care Seminar

The 1982 KMA Emergency Medical Care Seminar will be held June 8-10 at the Executive West, Louisville. The meeting is open to physicians, nurses, medical assistants, EMT's, paramedics and others interested in emergency medical care. The luncheon speaker on Tuesday, June 8, is Michael F. Olsen, Managing Director, The Foundation for Fire Safety. His topic is "The Impact of Burning Plastics on EMS Systems; Lessons Learned at the MGM." Olsen is Technical Consultant and Advisor for the Emergency Medical Services in the State of Idaho and the Universal Studios for Television Movies, "Emergency." George R. Nichols, II, M.D., Louisville, is guest luncheon speaker on Wednesday, June 9. His topic is "Coal Mine Disasters." Doctor Nichols is a Forensic Pathologist at the University of Louisville and Chief Medical Examiner for Kentucky. He is also Medical Director of the International Clinical Lab in Louisville and Assistant Clinical Professor in the Department of Pathology at the University of Louisville School of Medicine.

Registration fee for the meeting is $20 per day for KMA members, $40 per day for non-member Kentucky physicians. After Thursday morning's scientific presentations, participants may choose one of four activities—an afternoon at Churchill Downs, a bus tour to Shelbyville, a bus tour of the highlights of Louisville or a film at the hotel on, "Management of the Multiply Injured Patient." Luncheon will be included with each of these activities. The cost of these activities is included in Thursday's registration fee. Space is limited and will be available on a first come first serve basis. You must register in advance to be included in these activities. To make reservations at Executive West Motor Hotel, call (502) 367-2251. Be sure to indicate that you will be attending the Emergency Seminar to receive the convention rate.



George R. Nichols, M.D.



Michael F. Olsen

12TH ANNUAL EMERGENCY MEDICAL CARE SEMINAR

June 8, 9, 10, 1982
Executive West Motor Hotel
Louisville, Kentucky

Tuesday, June 8, 1982

Morning Session

Theme: *Penetrating Trauma*

8:00 a.m. Registration
8:40 a.m. Welcome and Orientation
W. Steve Aaron, M.D., Louisville
9:00 a.m. *"Ballistics of Penetrating Wounds"*
Donald M. Thomas, M.D., Louisville
9:30 a.m. *"Penetrating Wounds of the Chest"*
Marcus L. Dillon, M.D., Lexington
10:00 a.m. Coffee Break
10:20 a.m. *"Penetrating Wounds of the Head"*
William H. Brooks, M.D., Lexington
10:50 a.m. *"Penetrating Wounds of the Abdomen"*
Speaker to be announced
11:20 a.m. *"Penetrating Wounds of the Extremities"*
Thomas W. Wolff, M.D., Louisville
12:00 Noon Luncheon—*"The Impact of Burning Plastics on EMS Systems (Lessons Learned at the MGM)"*
Michael F. Olsen, Rosslyn, Virginia

Afternoon Session

2:15 p.m. *Manual Skills of Treating Penetrating Injuries Workshops
1. *Intravenous Lifelines*
Instructor to be announced
2. *Anti-Shock Trousers*
James A. Shewmaker, Jr., EMT-P, Louisville, Instructor
3. *Pressure Dressings in the Control of Hemorrhaging Sucking Chest Wounds*
Randall Herron, Campbellsville, Instructor
4. *Chest Tubes and Their Management*
Carol Borst, R.N., B.S.N., CEN, Louisville, Instructor

*Choose two workshops

3:15 p.m. Break & Switch Workshops
3:40 p.m. Continue Workshops
4:00 p.m. Ambulance Competition

Wednesday, June 9, 1982

Morning Session

Theme: *OB-GYN Emergencies*

8:00 a.m. *Registration*
8:45 a.m. Opening Remarks
Moderator: Cheryl Westbay, R.N., Louisville
9:00 a.m. *"Vaginal Bleeding During Pregnancy"*
J. Patrick Lavery, M.D., Louisville
9:30 a.m. *"Pre-Hospital Evaluation of Labor"*
Mary Ann Brown, R.N., Atlanta, Ga.
10:00 a.m. Coffee Break
10:20 a.m. *"Pelvic Inflammatory Diseases"*
Speaker to be announced
10:50 a.m. *"Sexual Offense Examinations"*
Francis B. Alvey, M.D., J.D., Ph.D., Louisville
11:20 a.m. *"Ectopic Pregnancies"*
Terrel D. Mays, M.D., Elizabethtown
12:00 Noon Luncheon—*"Coal Mine Disasters"*
George R. Nichols, II, M.D., Louisville

Wednesday, June 9, 1982

Afternoon Session

2-5 p.m. Recertification Course in Basic CPR
2:15 p.m. *Manual Skills of OB-GYN Emergencies Workshops
1. *Manual Skills of Vaginal Delivery*
Mary Ann Brown, R.N., Atlanta, Ga., Instructor
2. *Preparation of Transportation of the Neonate*
Roger J. Shott, M.D., Louisville, Instructor
3. *Movie on Rape Examination*
4. *Culdocentesis*
Robert Hughes, M.D., Louisville, Instructor

*Choose Two workshops

3:15 p.m. Break & Switch Workshops
3:40 p.m. Continue Workshops

Thursday, June 10, 1982

Morning Session

8:00 a.m. Registration
8:50 a.m. Opening Remarks

Theme: *Summertime Trauma*

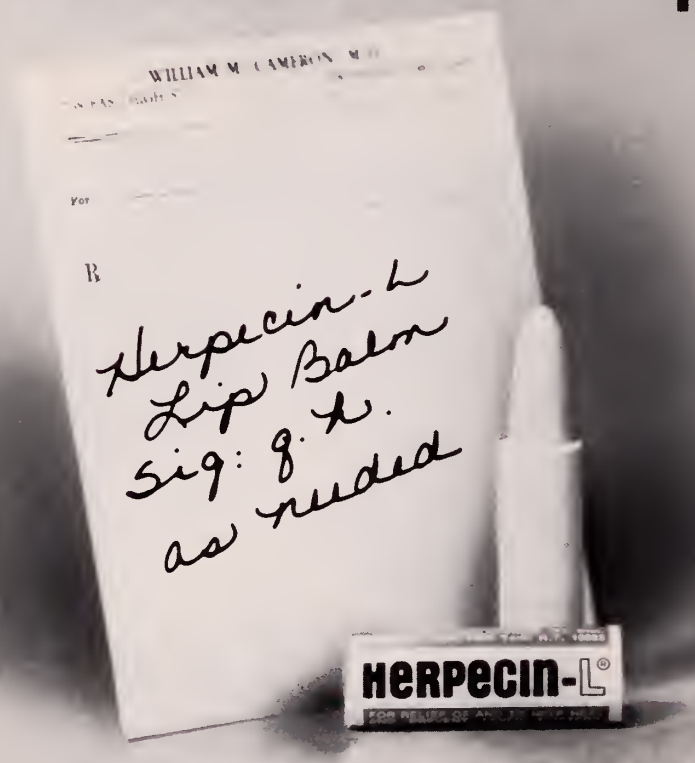
9:00 a.m. *"Poisonous Bites and Stings"*
Robert E. Arnold, M.D., Louisville

9:30 a.m. *"Summertime Accidents"*
Speaker to be announced
10:00 a.m. Coffee Break
10:20 a.m. *"Anaphylactic Shock"*
June Willis, R.N., Evansville, Ind.
10:50 a.m. *"Lightning Injuries"*
Mary Ann Cooper, M.D., Louisville

Theme: Major Disasters
(followed by
Question & Answer Period)

11:20 a.m. *"Radiation"*
Daniel F. Danzl, M.D., Louisville
11:30 a.m. *"Toxic Chemicals"*
Nancy Edwards, Pharm.D., Louisville
11:40 a.m. *"Burns"*
Bennett L. Crowder, M.D., Hopkinsville
11:50 a.m. Question and Answer Period on Major Disasters
12:15 p.m. Adjournment for afternoon activities

Dx: recurrent herpes labialis



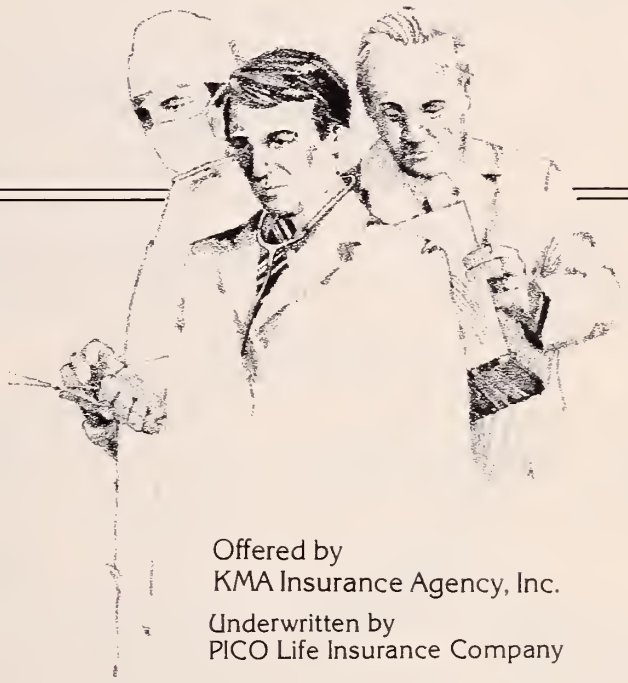
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Team Physicians Needed for Kentucky High Schools

The Committee on School Health, Physical Education and Medical Aspects of Sports recently conducted a survey to determine the number of team physicians providing service to Kentucky High Schools. As a result of the survey, the Committee found several high schools who are requesting assistance in locating a team physician.

Listed below are the communities and names of people to contact if you are interested in providing assistance to those communities.

Anderson County High School
Sonny Fentress
Lawrenceburg, KY 40342
502-839-5118

Ballard Mem High School
Bob Rogers
Rt. 1
Barlow, KY
502-665-5151

Battle County High School
Ewell Smoot, Jr. Principal
Owingsville, KY 40360
606-674-6325

Betsy Layne High School
Russell M. Frazier
Box 128
Betsy Layne, KY 41605

Boyle County High School
Arnold Marshall
Danville, KY 40422
606-236-5047

Butler High School
Elmer Collina
2222 Crums Lane
448-4620

David Baird
Eminence Schools
200 W. Broadway
Louisville, KY
845-5427

DeSales High School
Rex Robinson
425 Kenwood Drive
Louisville, KY
361-1231

Elliott County High School
Rick Mays
P.O. Box 687
Sandy Hook, KY 41171
606-738-5225

Estill County High School
Danny Click
Box 119
Irvine, KY 40336
606-723-3537

Fairview High School
Robert Morrison
Ashland, KY
325-2777

Fern Creek High School
Ray Cope
9115 Fern Creek Road
Louisville, KY 40291
239-6407

Heath High School
Don Werner
Rt. 1
West Paducah, KY
488-3126

Lexington Catholic High School
Tommy Starns
2250 Claysmill Road
Lexington, KY
277-7183

Lloyd Memorial High School
Jim Johnson
P.O. Box 99
Erlanger, KY 41018
727-1555

Oldham County High School
Bobby Hiles
Buckner, KY 40010
502-222-9461

Paintsville High School
Dwight D. Johnson
P.O. Box 152
Paintsville, KY 41240
789-3881

Paris High School
Randy Reese
700 Hilltop
Paris, KY 40361
606-987-7760, school 987-4545

Raceland High School
John Stephens
Ram Drive
Raceland, KY 41169
836-8221

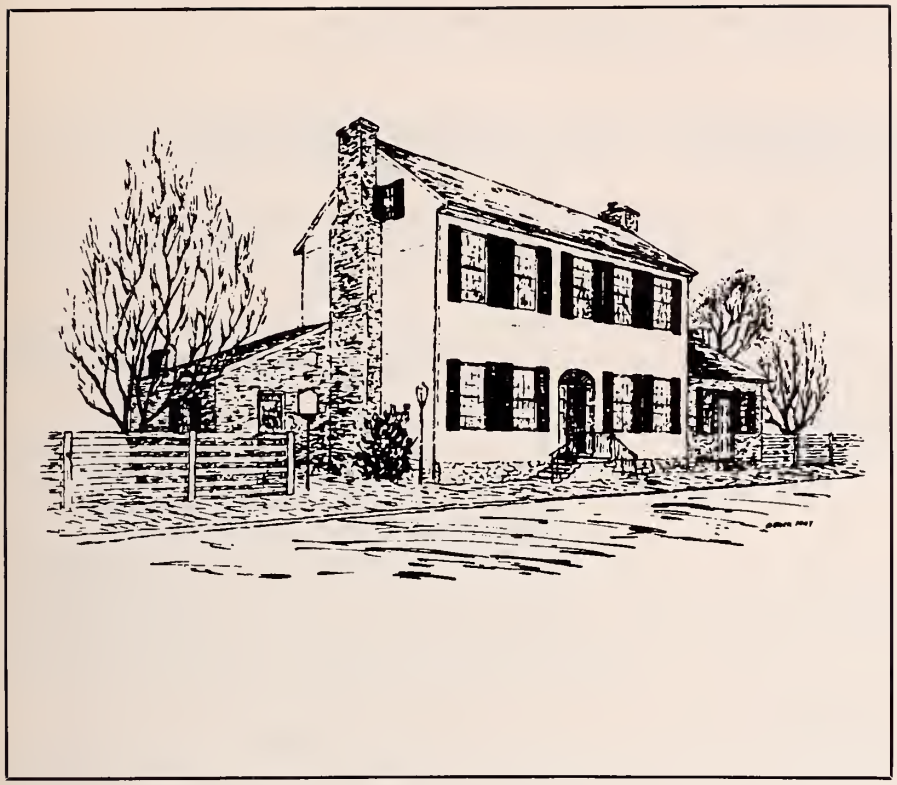
Trigg County High School
Gary Siegmund
Cadiz, KY 42211
502-522-6071

Union County High School
Richard Vincent
Rt. 4
Morganfield, KY
389-1454

Washington County High School
William Hardin or Virgil Chambers
Springfield, KY

West Hardin High School
Dane Hicks
Stephensburg, KY 42781
502-862-3003

Wheelwright High School
"Shorty" Jamerson
Wheelwright, KY 41669
606-452-2110



While attending the KMA Annual Meeting in Lexington, make plans to visit McDowell House, located 40 minutes away in Danville. The KMA owns and maintains this 18th century house, apothecary shop and gardens.

In a personally guided tour, you can hear the story of a history-making medical operation—the first successful removal of a diseased ovarian tumor, in 1809, by pioneer surgeon Doctor Ephraim McDowell. McDowell House was his home and he performed the operation in an upstairs bedroom of the house.

McDowell House has been restored and furnished to its condition at the time of the operation, presenting an example of life in Kentucky history. Doctor McDowell's apothecary shop and office next door have been restored and the furnishings in the house have been primarily provided by the Auxiliary to the KMA.

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Postgraduate Opportunities

MAY

2-5 Trauma '82: Counterpoint, The First Annual Eastern Tri-Regional Trauma Conference for Physicians and Nurses, Resorts International, Atlantic City, New Jersey

5-8 63rd Annual Meeting of the Virginia Society of Ophthalmology & Otolaryngology, Inc., Williamsburg Conference Center, Williamsburg, VA

13-15 Medicolegal Investigation of Death, Gordon Scott Hall, 540 East Canfield, in the Detroit Medical Center. For information: (313) 577-1180

14-15 Vitrectomy Course, University of Louisville, Health Sciences Center, Louisville

20 Allergy-Immunology Update, Hyatt Regency, Louisville

20-22 Adolescent Gynecology, Hyatt Regency, Louisville

20-23 Kentucky Surgical Society Annual Meeting, Lure Lodge, Lake Cumberland State Park

JUNE

4-5 Soft Tissue Surgery Workshop, The New Haven Ear Nose Throat & Facial Plastic Surgery Center, 98 York Street, New Haven, CT.

7-11 Postgraduate Institute for Career Emergency Physicians, Detroit Receiving Hospital, 4201 St. Antoine in the Detroit Medical Center. For information: (313) 577-1180

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA

13-18 Seventh Annual Family Medicine Review, Galt House, Louisville

JULY

7-8 Wayne State University Symposium on Cerebral Resuscitation, Westin Hotel, Detroit. For information: (313) 577-1180

27-31 Fifth Annual Symposium on Contempory Clinical Neurology, Palmetto Dunes Hyatt Resort, Hilton Head Island, SC

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

BOARD CERTIFIED OR ELIGIBLE SURGEON—needed to replace surgeon who is retiring from 43-man multi-specialty group in scenic Appalachian mountains of Southeastern Kentucky. Training in Thoracic Surgery preferred but not mandatory. Position would entail working with two other Board certified general surgeons in modern medical complex. Excellent opportunity professionally and for good life, substantial benefits, competitive salary, university affiliated, no investment required. Write sending curriculum vitae or call collect: James K. Hurlocker, M.D., Medical Director, Daniel Boone Clinic, Harlan, Kentucky 40831, 606-573-4520.

Application for Scientific Exhibits

1982 Annual Meeting **Kentucky Medical Association**

Hyatt Regency/Lexintgon Center **Lexington, Kentucky** **September 21, 22, 23**

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

 Address _____

 Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____
 (The draped booth has 4' side walls. This footage should not be included in backwall footage required.)
 SHELF DESIRED? _____ (Table 2' deep X width of backwall footage)

5. Will summray printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date _____ _____
Signature of Applicant

Fill Out and Mail to:

RICHARD A. KIELAR, M.D., Chairman
Scientific Exhibits Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1982.

- **KMA provides, without cost to the exhibitor, one 2 ft. Table as shelving, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 818 West Main Street, Louisville, Kentucky 40202.**
- ***Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.**
- **Transportation and erection costs are the responsibility of the exhibitor.**
- **Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.**
- **Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.**

ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

Nominations Being Accepted For Three Annual KMA Awards

Nominations are being accepted for three awards which are presented each year at the KMA Annual Meeting to outstanding physicians and lay people.

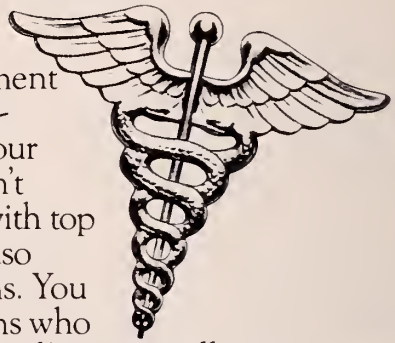
Nominees for the Educational Achievement Award are chosen from members of the Commonwealth who have made a significant achievement in medical or medically related education in areas of research, clinical application of medical practice and/or patient education. Nominations must be received in the Headquarters Office by July 1. Recipients are chosen by the Continuing Medical Education Committee.

The Distinguished Service Award is presented each year to a physician in the state who has contributed to organized medicine or individual medical service, community health or civic betterment and medical research or distinguished voluntary military service. The nominee may qualify on any one or a combination of these points.

The Kentucky Medical Association Award is presented to an outstanding lay person in honor of his or her outstanding accomplishments in the field of public health and/or medical care. July 15 is the deadline for receiving nominations for the Distinguished Service Award and the Kentucky Medical Association Award. Recipients will be chosen by the Awards Committee.

Nominee material should include background and historical information about the nominee as well as justification for the nomination.

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.
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MEDICAL OPPORTUNITIES

INTERNIST OR FAMILY PRACTIONER needed for vacation coverage last two weeks in July, 1982. Busy Family Practioner with no OB, primary office practice with one (1) night a week call, ER physician coverage for weekend. Physician can stay at my farm home adjacent to town. If interested, contact Glenn R. Womack, M.D., P.O. Box 344, Flemingsburg, Ky. 41041. Office Phone—Area Code 606-849-2323. Home Phone—Area Code 606-845-5651.

EMERGENCY PHYSICIANS $80,000-$90,000. Medical Associates, Inc. is actively seeking new emergency room contracts and is in need of additional full time physicians both now and for the future in Kentucky. Full time positions will have a yearly compensation of $80,000 to $90,000. Currently, we also are interviewing candidates for directorships with the group. Annual compensation will be in the $100,000 range. If you are interested in one of these positions, call Paul T. Brizendine, M.D. or Frank H. Poschinger at 606-638-9663 or write to Medical Associates, Inc., P.O. Box 729, Louisa, Kentucky 41230.

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Bactrim™
(trimethoprim and sulfamethoxazole)
succeeds

Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



in recurrent UTI...
a continuing record of high clinical effectiveness against common uropathogens

in acute otitis media in children...
effective against both major otic pathogens...with *b.i.d.* convenience

in acute exacerbations of chronic bronchitis in adults...
clears the sputum and lowers its volume...on *b.i.d.* dosage

in shigellosis...
faster relief of diarrhea than with ampicillin[2]

Before prescribing, please consult complete product information, a summary of which follows:

Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides, patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term, nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

Pregnancy: Teratogenic Effects. Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for infants less than two months of age.

URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN

Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.

ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:

Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.

PNEUMOCYSTIS CARINII PNEUMONITIS:

Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.

Supplied: *Double Strength (DS) tablets,* each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets,* each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500, Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry-flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension,* containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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Bactrim™ succeeds

in recurrent urinary tract infections*



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from site to source

Bactrim continues to demonstrate high clinical effectiveness in recurrent urinary tract infections. Bactrim reaches effective levels in urine, serum, and renal tissue[1]...the trimethoprim component diffuses into vaginal secretions in bactericidal concentrations[1]... and in the fecal flora, Bactrim effectively suppresses Enterobacteriaceae[1,2] with little resulting emergence of resistant organisms.

1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. **2.** Data on file, Medical Department, Hoffmann-La Roche Inc.

Bactrim™ DS

160 mg trimethoprim and 800 mg sulfamethoxazole

DOUBLE STRENGTH TABLETS

maximizes results with B.I.D. convenience

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*due to susceptible strains of indicated organisms

Please see previous page for summary of product information.

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- Metastatic Tumors of the Kidney
- Esophagectomy *Sans* Thoracotomy
- Achalasia
- Prostate Cancer

June 1982
Volume 80
Number 6

MOS

The Journal Of The Kentucky Medical Association

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Tenuate* Dospan* ℞IV

(diethylpropion hydrochloride USP)

75 mg controlled-release tablets

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The anorectic effectiveness of diethylpropion hydrochloride is well documented. No less than 17 separate double-blind, placebo controlled studies attest to its usefulness in daily practice. (Citations provided on request.)

Comparison of Anorectics

	Agent	Amine Classification	Half-life[a]	Variety of Dosage Form	Degree of CNS Effects
Low Abuse Potential	**Diethylpropion**	Tertiary	4-6 hrs.	25 mg tablet, 75 mg controlled-release tablet	Mild euphoria, mild stimulation
	Mazindol	Nonphenylethyl-amine	33-55 hrs.	1 & 2 mg tablet	Mild euphoria, mild stimulation
	Fenfluramine	Secondary	10-30 hrs.	20 mg tablet	Moderate sedation (mild to moderate depression, a side effect, is also sometimes designated as a CNS effect)
	Phentermine	Primary	19-24 hrs.	8 & 37.5 mg tablet, 8, 15 & 30 mg capsule 15 & 30 mg capsule (resin complex) 15 & 30 mg timed release capsule	Mild euphoria, moderate stimulation
High Abuse Potential	**Phenmetrazine**	Secondary	7-9 hrs.	25 mg tablet, 50 & 75 mg prolonged action tablet	Marked euphoria, marked stimulation
	Amphetamine	Primary	10-30 hrs.	Various	Marked euphoria, marked stimulation

[a]Delayed release characteristics of certain dosage forms must also be taken into account.

The #1 prescribed anorectic

Merrell Dow

See Prescribing Information on the next page before prescribing Tenuate.

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Tenuate®Ⓒ
(diethylpropion hydrochloride USP)

Tenuate Dospan®Ⓒ
(diethylpropion hydrochloride USP)
controlled-release
AVAILABLE ONLY ON PRESCRIPTION

Brief Summary

INDICATION: Tenuate and Tenuate Dospan are indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors. (hypertensive crises may result)

WARNINGS: If tolerance develops, the recommended dose should not be exceeded in an attempt to increase the effect; rather, the drug should be discontinued. Tenuate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly. When central nervous system active agents are used, consideration must always be given to the possibility of adverse interactions with alcohol. *Drug Dependence:* Tenuate has some chemical and pharmacologic similarities to the amphetamines and other related stimulant drugs that have been extensively abused. There have been reports of subjects becoming psychologically dependent on diethylpropion. The possibility of abuse should be kept in mind when evaluating the desirability of including a drug as part of a weight reduction program. Abuse of amphetamines and related drugs may be associated with varying degrees of psychologic dependence and social dysfunction which, in the case of certain drugs, may be severe. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG. Manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxications is psychosis, often clinically indistinguishable from schizophrenia. *Use in Pregnancy:* Although rat and human reproductive studies have not indicated adverse effects, the use of Tenuate by women who are pregnant or may become pregnant requires that the potential benefits be weighed against the potential risks. *Use in Children:* Tenuate is not recommended for use in children under 12 years of age.

PRECAUTIONS: Caution is to be exercised in prescribing Tenuate for patients with hypertension or with symptomatic cardiovascular disease, including arrhythmias. Tenuate should not be administered to patients with severe hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of Tenuate and the concomitant dietary regimen. Tenuate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage. Reports suggest that Tenuate may increase convulsions in some epileptics. Therefore, epileptics receiving Tenuate should be carefully monitored. Titration of dose or discontinuance of Tenuate may be necessary.

ADVERSE REACTIONS: *Cardiovascular:* Palpitation, tachycardia, elevation of blood pressure, precordial pain, arrhythmia. One published report described T-wave changes in the ECG of a healthy young male after ingestion of diethylpropion hydrochloride. *Central Nervous System:* Overstimulation, nervousness, restlessness, dizziness, jitteriness, insomnia, anxiety, euphoria, depression, dysphoria, tremor, dyskinesia, mydriasis, drowsiness, malaise, headache, rarely psychotic episodes at recommended doses. In a few epileptics an increase in convulsive episodes has been reported. *Gastrointestinal:* Dryness of the mouth, unpleasant taste, nausea, vomiting, abdominal discomfort, diarrhea, constipation, other gastrointestinal disturbances. *Allergic:* Urticaria, rash, ecchymosis, erythema. *Endocrine:* Impotence, changes in libido, gynecomastia, menstrual upset. *Hematopoietic System:* Bone marrow depression, agranulocytosis, leukopenia. *Miscellaneous:* A variety of miscellaneous adverse reactions has been reported by physicians. These include complaints such as dyspnea, hair loss, muscle pain, dysuria, increased sweating, and polyuria.

DOSAGE AND ADMINISTRATION: Tenuate (diethylpropion hydrochloride): One 25 mg. tablet three times daily, one hour before meals, and in midevening if desired to overcome night hunger. Tenuate Dospan (diethylpropion hydrochloride) controlled-release: One 75 mg. tablet daily, swallowed whole, in midmorning. Tenuate is not recommended for use in children under 12 years of age.

OVERDOSAGE: Manifestations of acute overdosage include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states. Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Overdose of pharmacologically similar compounds has resulted in fatal poisoning, usually terminating in convulsions and coma. Management of acute Tenuate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Intravenous phentolamine (Regitine®) has been suggested on pharmacologic grounds for possible acute, severe hypertension, if this complicates Tenuate overdosage.

Product Information as of June, 1980

Reference: 1. Abramson R, Garg M, Cioffari A, and Rotman PA: An Evaluation of Behavioral Techniques Reinforced with an Anorectic Drug in a Double-Blind Weight Loss Study. J Clin Psych 41:234-237, 1980

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Accommodations and Rates

No. Rooms	No. People	Rates
	Single	$57
	Double	$57
	Suites	$150-$350

If all rooms in the requested rate category are already reserved, the next available rate will be assigned. Making your reservation early will assist us in providing the type of room you request.

Date of Arrival_____

Departure_____

Check-in Time: 3:00 p.m. Check-out Time: 12 Noon

Name_____

Address_____

Names(s) of additional person(s) sharing room

Reservations must be received by AUGUST 30, 1982

Reservations will be held until 6:00 p.m. on day of arrival unless one night's deposit is received, or guaranteed by credit card.

_____ **Hold until 6:00 p.m. only**
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The Journal Of The Kentucky Medical Association

USPS 280-700

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Support	11	10	1
Oppose	15	0	15
Monitor After Appropriate Amendment By KMA	7	5	2
Support in Concept	11	4	7
Monitor	56	20	36
No Opposition	1	1	0
TOTAL: 101			

I believe the summaries included with this article mirror the good fortune KMA enjoyed during the 1982 session of the Kentucky General Assembly. While it is a pleasure to reflect on the success of our endeavor, we cannot ignore the fact that results of this sort have become increasingly difficult to realize.

The issues before the General Assembly are myriad, and it seems a concomitant number of individuals compete for Legislators' time in order to express their respective concerns as to certain of those issues. Therefore, your continued efforts, and those of our staff, are necessary to insure that KMA enjoys access to, and a working rapport with the 138 members of Kentucky's General Assembly.

A good relationship with the Governor's Office no longer provides assurance that legislative measures will be dealt with appropriately. "Legislative independence" is now the byword, and relationships with individual Legislators, particularly those in leadership positions, must be fostered and maintained. The Key Man System, KEMPAC and certain staff activities are designed to achieve that result, and there is no question that in 1982 KMA was equal to the task.

The point remains, however, that it is only by **increasing** our efforts that we will **continue** to prevail. It seems that everyone wants a piece of the action, and each Session the same groups and organizations return seeking to expand their area of endeavor in one fashion or another. The more established groups have become increasingly sophisticated, and they are often accompanied by newer ones seeking to initiate the trek toward governmental recognition that their brethren have already completed.

And so the cycle progresses. As the reimbursement dollar continues to shrink, so, too, will we see even more far-flung lobbying efforts aimed at gaining recognition or expanding existing areas of service delivery. A look at the summary of certain measures which KMA opposed and which were defeated during the '82 Session will provide some insight as to these present and future problems:

Senate Bill 147 would have allowed optometrists to use any and all therapeutic drugs which they deemed appropriate in treating eye disease. In effect, this bill would have allowed optometrists to practice medicine.

Senate Bill 82 would have mandated that coverage be provided under all health insurance policies for the services performed by a clinical social worker.

Senate Bill 111 called for the licensing of those engaged in the practice of lay midwifery.

Senate Bill 3 called for the certification of Physicians' Assistants.

Senate Bill 249 would have required that coverage be provided under all health insurance policies for the activities of those "purveyors of health services which are licensed to perform such services."

Senate Bill 304 and **House Bill 628** would have mandated that coverage be provided under health insurance policies for the services performed by "all practitioners of the healing arts recognized by the laws of the Commonwealth of Kentucky."

House Bill 104 would have mandated that coverage be provided under all health insurance policies for the services performed by a chiropractor.

House Bill 125 would have altered the evidentiary standards applicable to adult abuse and imposed an undue liability on physicians, as well as those who fell within the category of a "caretaker" under the terms of this proposal.

House bill 237 would have repealed the current law requiring motorcyclists to wear helmets.

House Bill 369 would have established a new Chapter of the Kentucky Revised Statutes to deal with the certification of mental health counselors and family therapists.

House Bill 590 called for physician involvement in the issue of capital punishment, inasmuch as lethal injections, and a process for their adminstration, would have replaced electrocution as the method of execution within the Commonwealth.

HCR 73 would have called for a study of the regulation of the health profession within the Commonwealth.

However, not all of KMA's activities were defensive in nature. As a result of resolutions passed by our House of Delegates and determinations made by the State Legislative and Quick Action Committees, the Association supported 11 pieces of legislation, 10 of which were enacted by the General Assembly. Summaries of some of those measures are set out below:

Senate Bill 271 will substantially reform Kentucky's Coroner System.

Senate Bill 2 calls for the use of child passenger restraints. While the penalty provision was deleted from this bill, it is believed that the measure will still have a beneficial and educational impact.

Senate Bill 27 requires that all drugs prescribed and marketed in Kentucky in a finished solid dosage be imprinted with a product identification symbol.

Senate Bill 32 requires that each of the Governor's Executive Orders calling for reorganization within State Government be presented to the General Assembly as separate pieces of legislation.

House Bill 531 requires that the Commissioner for the Bureau for Health Services be a physician.

House Bill 325 insures that where a district health department is established, the physician membership would be at least 25% of the Board.

House Bill 128 requires testing for inborn errors of metabolism including, but not limited to, PKU in infants.

One other item is worthy of note. The Certificate of Need Law was revised substantially during this past Session. As you are aware, physicians' private offices and clinics have always been exempted from the coverage of that statute. However, when a Senate Committee Substitute for the original proposal was introduced, it contained a provision which might well have brought the private physician community under Certificate of Need jurisdiction. KMA was able to have that provision deleted from the bill.

KMA enjoyed a remarkably successful 1982 Legislative Session. Everyone pulled together, especially the Legislative Key Men, and the results speak for themselves. I believe I speak for all the officers and staff of KMA when I say "thank you."

Carl Cooper, Jr., M.D., Chairman
Committee on State Legislative Activities



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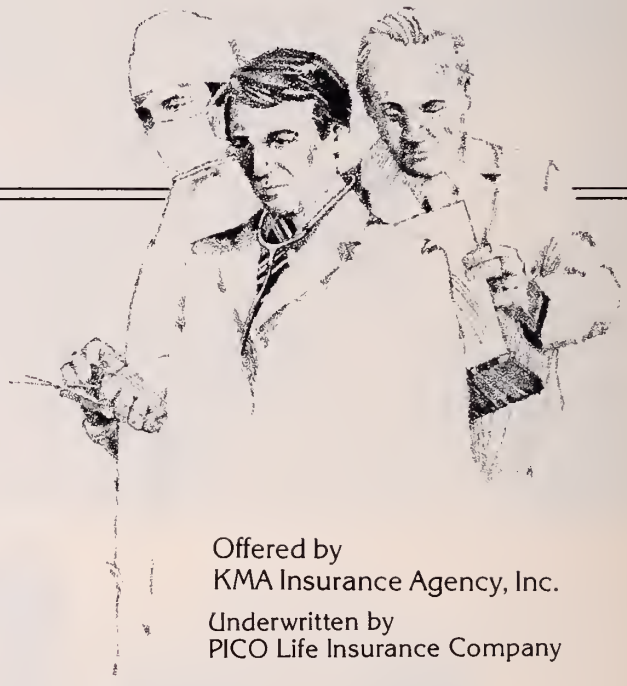
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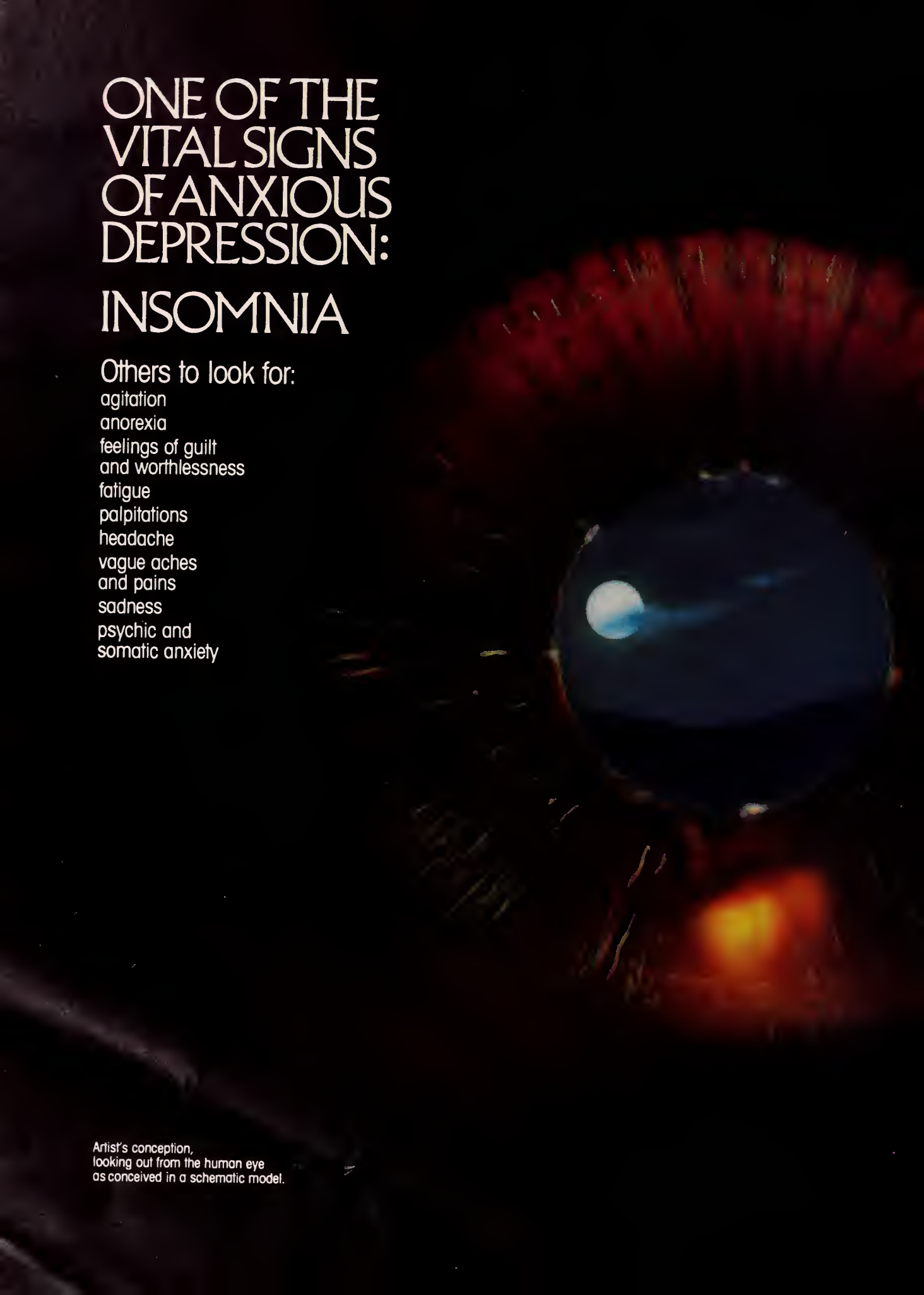
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***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
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Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
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Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
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Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male; breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
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Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg. physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
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The Journal Of The Kentucky Medical Association

June 1982 Volume 80 Number 6

SCIENTIFIC

Metastatic Tumors of the Kidney

SUVAS G. DESAI, M.D.

A case of secondary carcinoma of the kidney five years following left breast carcinoma is described. The pertinent literature is reviewed. The patient was particularly interesting since she did not have evidence of any metastates except her left renal involvement.

Metastatic tumors of the kidney are extremely uncommon. Even in necropsy studies, tumors rarely metastasize to the kidney. Clinical detection of secondary tumors in the kidney is very rare, in contrast to necropsy findings.[1,2,3] Such secondary metastatic tumors are often of little clinical consequence since they are rarely the only metastatic lesion. Furthermore, the clinical course of the patient with widespread malignancy is usually not altered by treatment directed toward removal of the renal metastatic focus.

In a review of 500 autopsies, Klinger (1951) found 21 cases of primary lung cancer, 17 of which exhibited metastases to one or both kidneys.[1] Olsson (1971) found that 20% of the patients dying of pulmonary cancer exhibited renal metastases, 40% of these being unilateral.[4]

Other primary sites include testes, ovary, large and small bowel and stomach. In addition, the kidney may be involved secondarily by invasive spread of malignancy from contiguous structures, such as the colon, pancreas and the various retroperitoneal tissues.[3] The kidney may also be involved by infiltrative malignant process such as lymphoma, leukemia and Hodgkin's disease.

From 210 St. George Park, Richmond, KY 40475

Most often metastases of lesions within the kidney are silent, causing no clinical symptoms or signs. Occasionally, the patient may exhibit a flank mass. Ten to twenty percent of patients with secondary renal tumors may have microscopic or macroscopic hematuria. Regardless of the extent of renal involvement, various other metastases, general constitutional debility and anemia make the prognosis unfavorable.[3]

Willis reported an 8% incidence of metastatic carcinoma to the kidney in 500 consecutive postmortem examinations of patients who died with carcinoma.[3] Klinger reported on 5,000 autopsies at Henry Ford Hospital, 118 were found to have renal involvement with metastatic cancer.[1] Abrams found renal involvement in 12.6% of 1,000 of autopsies of various types of cancer.[6] (Table 1)

TABLE 1

Author	Year	# of patients	Renal involvement	%
Klinger	1951	5,000	118	3
Willis	1952	500	40	8
Abrams	1950	1,000	126	12.6

Case Report

A 50-year-old white female presented with a one year history of left flank pains, fairly severe at times. She also complained of anorexia and a 30-pound weight loss in one year.

Past medical history included a left radical mastectomy performed five years previously. Pathology report was invasive, poorly differentiated adenocarcinoma. One/twenty-one left axillary nodes were positive.

Physical examination revealed a well-developed, well-nourished white female in no acute distress. Temperature was normal. Pulse 80 and regular. Respirations 20. There was no evidence of lymphodenopathy. Heart showed a normal sinus rhythm. Lungs were clear to percussion and auscultation. Abdominal examination did not reveal any palpable masses. Pelvic examination was negative.

Her laboratory data included a hemoglobin of 15.0 grams percent, BUN was 5.0 milligrams percent with a creatinine of 1.2 milligrams percent. SMA-12 was within normal limits. Her chest x-ray was clear. Bone scan was normal. Her excretory urogram revealed a non-functioning left kidney with a normal right collecting system. (Figure 1) A left retrograde ureterogram revealed a normally appearing lower ureter with non-visualization of the left pyelocalyceal system. (Figure 2) A renal angiogram was performed. It revealed a small left artery with non-visualization of the left renal unit. (Figure 3)



Fig. 1: An excretory urogram revealed a non-functioning left kidney with a normal right collecting system.

The patient underwent a left renal exploration and a left nephrectomy was performed. The left kidney appeared as a single, hard mass which also encompassed the left renal pelvis and hilar area. It had virtually no identifiable collecting system. On cross-section it appeared to have a neoplastic process extensively infiltrating the kidney substance evoking desmoplastic fibrous tissue proliferation. Histopathologic diagnosis was poorly differentiated adenocarcinoma of the kidney metastatic from the breast.

Her post-operative course was benign. She subsequently underwent chemotherapy. She expired one year later of an acute myocardial infarction. No autopsy was performed.

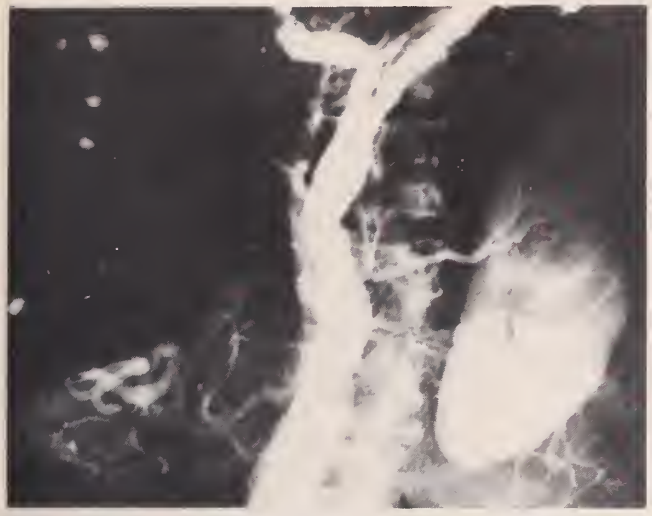


Fig. 2: A left retrograde ureterogram showing non-visualization of the left pyelocalyceal system.



Fig.3. A renal angiogram revealing non-visualization of the left renal unit.

Conclusion

A case of clinically detected secondary carcinoma of the kidney is presented, with the left kidney as possibly the only organ involved. The survival outlook for patients with secondary carcinoma of the kidney is not favorable. Treatment, perhaps, should be individualized—the patient's age, general constitution and single versus multiple organ involvement being the determining factors. The advent of more selective chemotherapeutic agents may change the current outlook.

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Esophagectomy *Sans* Thoracotomy

W. T. MATTINGLY, JR., M.D., M. L. DILLON, JR., M.D.,
J. S. STROHECKER, M.D. AND E. P. TODD, M.D., PH.D.

Introduction

INTEREST has recently been revived in the procedure of esophagectomy without thoracotomy. A case report is presented which illustrates that this may be an appropriate procedure for selected patients. It is a procedure that can be performed safely, but has certain limitations from the standpoint of a pure cancer operation.

Case Report

A 53-year-old male with a complicated GI history was seen at a local hospital in 1970. At that time he underwent fiberoptic endoscopy for upper GI symptoms and a diagnosis of hiatal hernia with large esophageal ulcer was made.

In 1974 he was readmitted for a perforated ulcer and underwent an emergency vagotomy, antrectomy and Nissen fundoplication. He had an uncomplicated postoperative course, but later continued to have symptoms of dysphagia and reflux. He also acquired symptoms of dumping.

In 1978 he was admitted to the Lexington Veterans Administration Hospital for evaluation of Transient Ischemic Attacks (TIA's). During this admission he also underwent a GI work-up which revealed irregular filling defects in the esophagus (Figure 1). Esophagoscopy revealed large papillomatous lesions with Barrett's esophagus (Figure 2). Biopsies were suspicious for malignancy. A barium enema was normal. An angiogram of the carotid arteries revealed an ulcerative plaque and it was elected, in view of the esophageal lesions, to treat this nonsurgically.

In January 1979, he underwent an exploratory laparotomy with total thoracic esophagectomy via abdominal and left cervical approaches. A right colon interposition was performed via the substernal approach requiring takedown of the Nissen through an area of dense adhesions and closure of the stomach. The stomach could not be used as a conduit because of previous surgery. The head of the clavicle was resected to facilitate reconstruction and delivery into the neck. An incidental appendectomy was performed. He received a total of 5400 rads of radiation to the mediastinum postoperatively and was discharged on the 21st postoperative day. He is alive and well without evidence of malignancy two years post surgery, although he has had one subsequent hospitalization for a stroke that resolved.

Pathological examination in this case revealed columnar epithelium with areas showing hyperplastic polyps, adenomatous polyps, villous adenoma, and carcinoma in situ in multiple areas. In addition, there were three areas of adenocarcinoma (Figures 3, 4).

Discussion

In 1950, Barrett[1] described a stricture associated with a gastric-lined esophagus. At that time he felt that the stricture and gastric-lined esophagus were congenital lesions. In recent years, most authorities feel that gastric epithelium in the esophagus is acquired[2,3] as a result of gastric reflux. Typically the epithelium shows a spectrum of histologic change and it is not unusual to have an adenocarcinoma develop near areas of atypia.



Fig. 1

From the University of Kentucky, Albert B. Chandler Medical Center, Lexington, KY 40536

In a recent pathological review, Haggitt[4] described 14 adenocarcinomas occurring in patients with Barrett's esophagus. Two of these adenocarcinomas were associated with papillary formation microscopically and grossly, as in our case. In four of four submitted cases, cytologies were positive. Half of the lesions occurred in the middle third of the esophagus and half in the lower third. Haggitt felt that correction of reflux probably did not alter the course of malignant histologic changes since two patients who developed carcinomas had had previous anti-reflux procedures.

Surgical treatment for carcinoma of the esophagus continues to be a very difficult area with poor results. Various surgical procedures may be performed for carcinoma of the esophagus, with or without radiation, including the following: esophagogastrectomy with reconstruction via esophagogastrostomy (our procedure of choice), Heimlich reverse gastric tube with cervical anastomosis with or without esophageal resection, resection of the tumor without reconstruction utilizing a feeding gastrostomy and cervical esophagotomy for diversion of secretions, palliative intubation of the carcinoma, or esophagectomy without thoracotomy with reconstruction.

With so many procedures advocated, it could be ascertained that the results of all may be poor. In 1980, the University of Kentucky Medical Center reported a review of the surgical treatment of carcinoma of the esophagus.[5] Twenty-nine patients underwent resection of carcinoma resulting in an operative mortality of 17% and an average survival of 9.3 months. Eighteen patients underwent intubation with or without irradiation and had an average survival of two months. These results are comparable to results reported in the literature and reflect the serious nature of this disease.

The history of esophagectomy without thoracotomy apparently began in 1913. Denk[6] used



Fig. 2

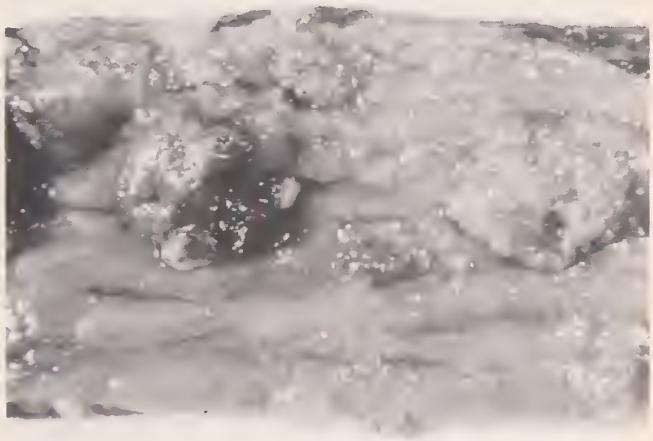


Fig. 3

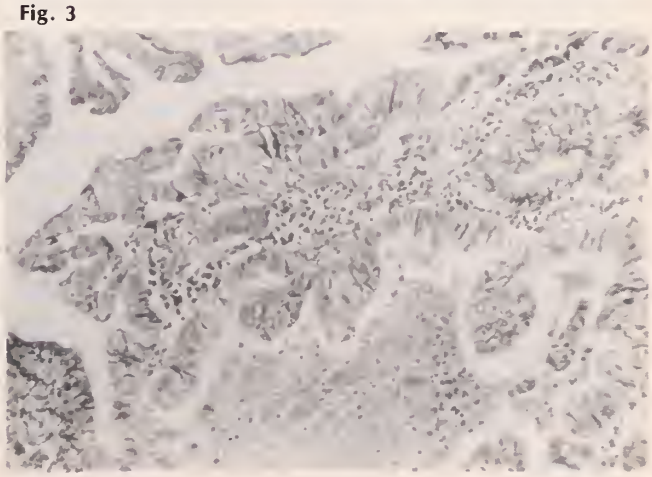


Fig. 4

a device much like a vein stripper to remove the esophagus from a patient who subsequently died. In 1933, Turner[7] reported a pull-through esophagectomy for carcinoma with reconstruction via an external tube. Ong[8] reported removal of a normal esophagus in continuity with resection of a pharyngeal carcinoma. Thereafter, a number of reports appeared in foreign and domestic literature utilizing this procedure primarily as a concurrent procedure for pharyngeal carcinoma.

The recent revival of interest by thoracic surgeons began with reports by Orringer[9] and Szentpetery.[10] Orringer reported 26 patients, four with benign disease, who underwent esophagectomy without thoracotomy. He described an average blood loss of 1050 cc's and had five operative deaths, none of which were due to operative technique. Szentpetery presented 17 patients, all of whom had carcinoma. These patients underwent pull-through esophagectomy and one patient had a single tear of the trachea which required thoracostomy. There was one operative death and the average blood loss was 1.8 units.

In discussing Doctor Orringer's presentation, Doctor R. Belsey[9] suggested that this was "blind surgery"; that a lack of direct hemostasis would "make a mess"; and that this was an expedition into the Dark Ages. He also felt that Doctor Orringer was a good surgeon, but he had to suspect that luck played a part in his good results. Doctor Belsey stated that esophagectomy without thoracotomy was a poor operation to teach residents and that the route of reconstruction should not be through the mediastinum, as advocated by Doctor Orringer.

Certainly there are advantages to esophagectomy without thoracotomy: for example, operative time is theoretically shorter, patients have less postoperative pain because of the absence of a thoracotomy incision, problems with blind loops and esophageal secretions are minimal, and there is less physiologic insult in debilitated patients and patients with COPD.

There are also disadvantages: the practical ones include difficult exposure which causes occasional indirect vision, particularly with that portion of the middle esophagus where the largest vessel off the aorta to the esophagus arises; a thoracotomy may be required to treat complications such as tracheal disruption; pneumothorax can occur requiring, at minimum, a tube thoracostomy, and possible injury to the thoracic duct. Theoretic disadvantages include the fact that tumor-bearing nodes are left intact which violates the principles of a cancer operation. It may be argued that esophageal resections have such poor long-term results that this consideration may be of minimal importance. In our experience, only one patient out of 29 treated aggressively with esophagogastrectomy and reconstruction has survived longer than two years.

Summary

Esophagectomy without thoracotomy may be an appropriate procedure for selected patients; the premalignancy of Barrett's esophagus may be such a case. Traditional resection has the advantage of removing adjacent tissue, nodes, or resection for cure. Esophagectomy without thoracotomy probably has more utility in benign disease or as a concurrent resection in patients undergoing resection for cervical pharyngeal carcinoma. Though lacking a thoracic incision, this must be considered a thoracic procedure since it has all the complications inherent in any thoracic operation.

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Achalasia Simulating Mediastinal Tumor

PORTER MAYO, M.D. AND SIBU P. SAHA, M.D.

A patient whose history of seminoma and smoking combined with a chest x-ray revealing a mass, strongly indicated mediastinal tumor. Achalasia was determined to be the true diagnosis, following tomograms and barium swallow. Though mediastinal tumors are preferably treated by surgical resection, the possibility of a "false" mediastinal tumor, however rare, should keep the surgeon alert.

MEDIASTINAL tumors are most often discovered by routine chest x-ray. The radiograph shows an abnormal shadow in the mediastinum and its etiology usually awaits percutaneous needle biopsy or surgical exploration.[1,2] In those patients having symptomatic mediastinal tumors, 50% are malignant, but if asymptomatic, 90% are benign.[3,4] Lyons, in a study of 782 cases, denotes 44 different mediastinal lesions and divides them into six categories. One category representing 5.4% of the mediastinal tumors includes hernia, diverticula and achalasia.[5]

There have been many reports of carcinoma of the esophagogastric junction mimicking achalasia and often having the presenting symptoms of achalasia.[6,7] The differentiation from the viewpoint of selecting appropriate therapy is, of course, essential. Although far less frequently observed, the differentiation between tumor and achalasia and mode of therapy is equally applicable to the mediastinum. We present a patient showing a superior mediastinal mass and having a history of seminoma of the right testicle.

Case Report

This 71-year-old white man was first examined in October 1978. Chest x-rays had been interpreted as showing a mediastinal tumor. Symptoms included difficulty in swallowing for 12 to 15 years before our examination. Even so, he had learned to accommodate foods by avoiding those particular ones, usually solids, which aggravated swallowing. Liquids caused minimal difficulty. During the previous two years he had had a weight loss of 28 pounds. Regurgitation and constipation also were noted. Additional concern was created by his history of smoking three packages of cigarettes per day over a period of 50 years and a history of surgical removal of a seminoma of the right testicle in May 1969. Physical examination of the neck and chest was normal. Chest x-ray showed the lungs to be fully expanded and exhibiting a mild diffuse emphysema. (Figure 1A) Both diaphragms were mildly depressed. The trachea was slightly deviated to the right. A soft, round density, 4 cm. in diameter was present on the lateral view posteriorly positioned in the superior mediastinum just anterior to the spine at the level of the third rib. (Figure 1B)

Although the chest x-ray and past history were very suggestive of tumor, the patient's long standing dysphagia prompted tomograms and barium swallow which confirmed the diagnosis. Massive dilatation and tortuosity of the esophagus were present with a beak-shaped termination of the distal esophagus and a huge food bolus, masquerading as a tumor, lodged in the proximal esophagus behind the trachea. This patient was subsequently treated by left thoracotomy and esophagomyotomy with relief of symptoms and elimination of the false mediastinal tumor.[8,9]

Discussion

Achalasia can usually be detected by routine chest x-ray, but in our reported case the customary widening of the mediastinum and associated esophageal fluid level gave no such obvious clue. Most often symptoms are of long duration, namely months or years; however, 12% of patients with idiopathic achalasia have recent onset of symptoms.[10] By contrast, carcinoma is more apt to be associated with a brief history and a rather rapid progression of the disease. Our patient's age (71), sex (male), weight loss (28 lbs.), chest roentgenogram (mediastinal mass), smoking history (three packs per day for 50 years), and history of seminoma (right testicle), heavily weighted the probable diagnosis of a malignant lesion. Alternatively, the long history of dysphagia suggested benign disease.

Meares (1972), in a review of the literature, presented two cases of seminoma, one of which had an atrophic testis and clinically unsuspected primary testicular neoplasm that simulated a primary semi-

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noma of the mediastinum.[11] Such a possibility of metastases had to be of primary concern in our patient.

The proven standard technique of diagnosis, namely, history, physical exam, conventional chest x-rays, were supplemented in our work-up with tomograms and barium swallow. We concur with Lyons in his statement that contrast studies of the esophagus are absolutely necessary in the examination of all mediastinal masses, and this holds true even if the medical history fails to elicit any symptoms attributable to the esophagus. As in our case, it may show an unexpected achalasia of the esophagus as the cause of the mediastinal abnormality.[8,12] Mediastinal tumors lend themselves to treatment, but an absolute diagnosis is essential.

Acknowledgement

We wish to acknowledge the contribution of Camille M. Jernigan, Medical Research Journalist, Mayo, Long & Saha, P.S.C.

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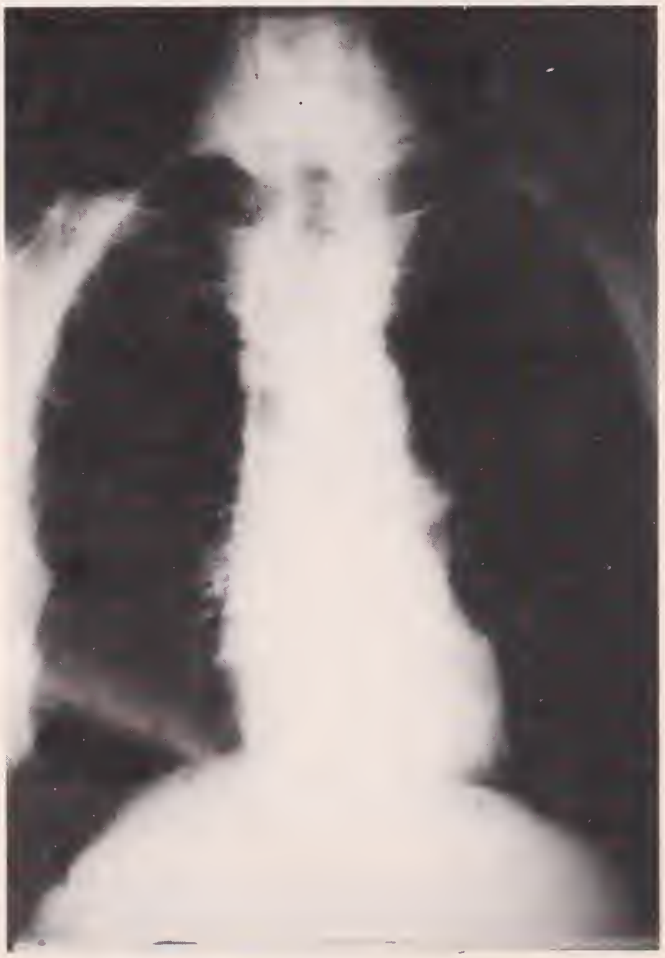


Fig. #1A: PA view of chest shows no abnormality.



Fig. #1B: Lateral chest x-ray shows large, soft, round mass in posterior mediastinum. Arrows delineate periphery of "tumor."

Early Diagnosis of Prostate Cancer

JON W. PAULI, MARTIN S. BLUMENREICH, M.D. AND JOSEPH C. ALLEGRA, M.D.

The early diagnosis of prostate cancer is highly desirable since a patient's prognosis greatly worsens with progressive stage disease. The digital rectal exam is the primary screening tool for prostate cancer, while needle biopsy, prostatic acid phosphatase, prostatic fluid assay and transrectal ultrasonography are all important adjunctive measures the clinician uses to confirm his original suspicions. A brief synopsis of prostate cancer is presented, in addition to descriptions of these latest techniques in the diagnosis of early prostatic malignancy.

CANCER of the prostate gland is a very common malignancy in males. Of all malignancies in males in the United States, it has an overall incidence of 17%, ranking it second only to lung cancer with an incidence of 22%. The National Cancer Institute's Surveillance, Epidemiology, and End Results Program predicts that in 1981, 70,000 new cases of prostate cancer will be diagnosed and that 22,700 males will die from this disease.[1] At the present time, no known etiology exists for prostate cancer, though incidence increases significantly with age.[2]

Prostate cancer may arise in any lobe of the prostate gland, where in its early stages, it is in the form of multifocal lesions. These multifoci soon join together to create a poorly delineated area of neoplasm. Grossly, this neoplastic tissue is described as "gritty and firm." Histologically, the majority of prostate cancers are adenocarcinomas and are present in well characterized patterns with the epithelial cells exhibiting uniform size and shape. The size of the glandular formation and the degree of nuclear anaplasia are the criteria by which prostate cancers are graded. Grade I prostate cancer indicates a well differentiated lesion, while Grade III is used to define a poorly differentiated prostatic neoplasm. Grade II prostate cancer is intermediate in terms of differentiation.[3]

Table I illustrates the most commonly used staging system for adenocarcinoma of the prostate.[4] Patients with Stage A prostate cancer have negative rectal examinations and are asymptomatic, with carcinoma typically appearing incidentally as a result of a transurethral resection of the prostate. Stage B disease, likewise, is often characterized by a lack of urinary symptoms and laboratory abnormalities, though a thorough digital rectal exam will often produce clinical findings of a nodule limited to the prostate gland. Stage C prostate cancer refers to disease that has spread locally beyond the prostatic capsule. Urinary abnormalities are typically seen with these patients. Stage D disease indicates disseminated carcinoma, with the most common sites of metastasis being pelvic lymph nodes and bone.[5]

Staging systems such as this one are very important in dealing with cancer patients since each stage is associated with a particular type of therapy, which in turn, yields a particular prognosis for the patient.

Generally speaking, surgery is the treatment of choice for Stage A and B disease. Stage A_1 prostate cancer, however, is best left untreated, yet carefully monitored. Radiation therapy is preferred for Stage C disease, while chemotherapy or hormonal therapy is utilized in the treatment of Stage D prostate cancer.[2] With these types of therapies, five-year survival rates for prostate cancer patients vary according to stage as follows:

Stage A	75%
Stage B	60-70%
Stage C	35-45%
Stage D	20%

Although surgical "cures" are very common in Stage A and B disease, the vast majority of patients (85-90%) present with advanced stage disease and, thus, are not candidates for surgical

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treatment, but instead are treated primarily with palliative forms of therapy. It is important to note that significant numbers of patients who are clinically designated as having Stage A or B prostate cancer are incorrectly staged. Therefore, upon radical prostatectomy and pelvic lymph node dissection, it is occasionally found that the patient has, in fact, Stage C or D prostate cancer.[5]

Mass screening tests for the detection of prostate cancer are not feasible now, though research continues toward the development of such a test.[6] Thus, it must be stressed that the digital rectal exam, as part of every good physical exam, remains the principal method for disclosing irregularities in the prostate gland which may indicate the presence of carcinoma of the prostate. Characteristic findings in this regard are a prostate gland that is "nodular, irregular, or stone-hard."[7]

One must also be suspicious if symptoms of prostatitis are discovered. Very early stage prostate cancer is almost always asymptomatic, while progressive stages present with problems in initiating micturition, cystitis, dribbling, and urine retention. Hematuria is unlikely. Advanced stage disease typically presents with obstructive symptoms secondary to either ureteral obstruction or bladder neck obstruction. Obstruction may lead to renal failure characterized by uremia, anemia, nausea and anorexia. Bone pain, a frequent presenting symptom, is due to the hematogenous spread of tumor, primarily to pelvic bones and the spine.[2]

Rectal Exam

As previously mentioned, the digital rectal exam is the most sensitive test for detecting pathology of the prostate gland. Despite the increasing emphasis on highly technical, often expensive diagnostic tests, studies have shown that the rectal exam provides an excellent means of separating men with potential prostate cancer from those devoid of prostatic disease. It also enables the clinician to evalute the rectum, the anal sphincter, and the characteristics of the patient's stool.[7] If the digital rectal exam indicates a normal prostate in an otherwise asymptomatic patient, then yearly complete physical exams are recommended, especially for males over the age of 40. If, however, the examiner finds a prostate suspicious for carcinoma, then it is suggested that three additional tests be performed: 1) needle biopsy of the prostate, 2) prostatic acid phosphatase, 3) prostatic fluid assay.

Needle Biopsy

This procedure, performed under local anesthesia with a disposable "Tru-cut" or a Silverman biopsy needle, is approached via the transrectal or transperineal route. The specimen is then submitted to a pathologist for evaluation. Needle biopsy of the prostate gland is said to yield accurate results between 81% and 93% of the time. These figures were obtained through a comparison of tissue obtained via the needle biopsy with that obtained after a subsequent prostatectomy. Complications associated with the needle biopsy are hematuria and infection. One study reported a 12% complication rate: 4% was due to hematuria, while 8% of the cases developed post-biopsy fevers.[8]

Prostatic Acid Phosphatase

Acid phosphatases are enzymes which catalyze the hydrolysis of phosphoric esters in an acidic environment. It has long been realized that patients with metastatic prostate cancer typically have elevated levels of serum acid phosphatase[9] Sources of acid phosphatase include prostate, liver, spleen, bone, kidney, leukocytes and erythrocytes.[10] Prostatic acid phosphatase, a normal exocrine secretion of prostatic epithelial

Table I

Clinical Staging System for Adenocarcinoma of the Prostate

American Urological System (A-D)—After Boxer

Stage A—incidental finding	
A_1	Focal
A_2	Diffuse
Stage B—confined to prostate	
B_1	Small, discrete nodule
B_2	Large or multiple nodules or areas
Stage C—localized to periprostatic areas	
C_1	No involvement of seminal vesicles <70g
C_2	Involvement of seminal vesicles >70g
Stage D—metastatic disease	
D_1	Pelvic lymph node metastases or ureteral obstruction causing hydronephrosis
D_2	Bone or distant lymph node or organ or soft tissue metastases

cells, leaks into the interstitium and blood stream when prostatic malignancy is present. Until recently, colorimetric assays have been used to detect abnormal serum acid phosphatase levels. This test, however, is not specific for prostatic acid phosphatase. Immunochemical methods, namely radioimmunoassay and counterimmunoelectrophoresis, have been developed in recent years under the premise that prostatic acid phosphatase is antigenically distinct from acid phosphatase from other sites in the body.

In the radioimmunoassay technique, labeled anti-prostatic acid phosphatase antibodies obtained from animals are allowed to react with human serum samples containing prostatic acid phosphatase. A gamma counter records the concentration of antigen/antibody complexes. A less sensitive, but reportedly useful test, is counterimmunoelectrophoresis. This procedure creates a precipitation line of antigen/antibody complexes by moving antigen and antibody in opposite directions under the influence of an electrophoretic current.[9]

Thus, due to the high sensitivity and specificity of the immunochemical methods of measuring prostatic acid phosphatase, researchers have reported success in detecting elevated levels of this enzyme in patients with Stage A and B prostate cancer, as well as later stage disease.[11]

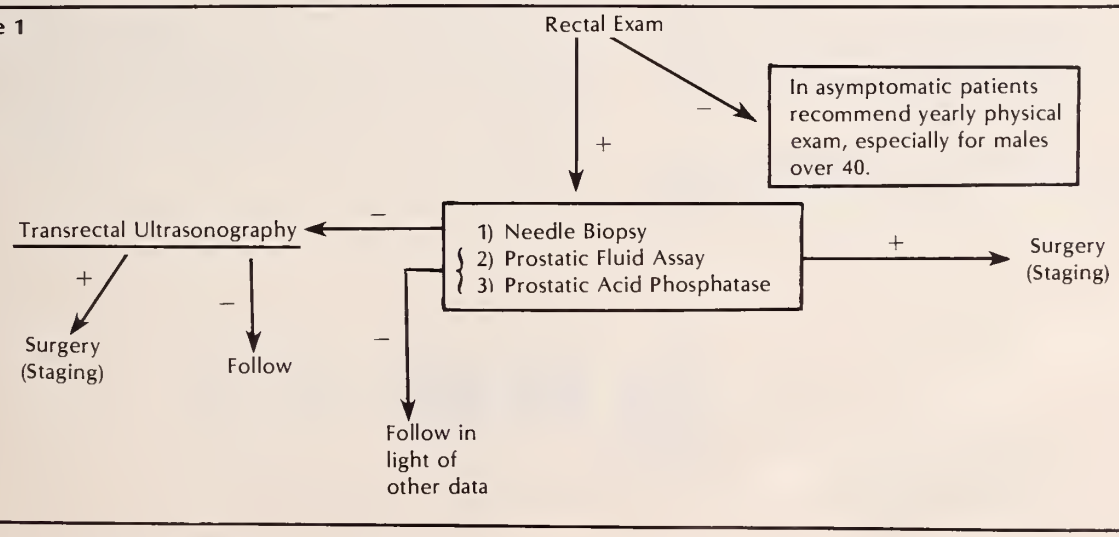
Prostatic Fluid Assay

The analysis of prostatic fluid for protein abnormalities is an exciting new prospect for the diagnosis of early stage prostate cancer. Prostatic fluid can be easily expressed by rectal massage as part of the digital rectal exam. Once the sample is obtained, it is subjected to electrophoresis which allows for a separation and quantitation of the various proteins in the fluid. It has been found that in 80% of patients with cancerous prostates, the isoenzyme pattern of lactate dehydrogenase (LDH) contains more LDH-5 than LDH-1. In normal tissues, on the other hand, this ratio is reversed with a predominance of LDH-1 over LDH-5. Such a reversal is often seen in patients with prostatitis and occasionally in patients with benign prostatic hypertrophy (BPH).

Electrophorectic analysis of complements C3, C4, and transferrin, however, shows drastic changes only in patients with prostate cancer. Therefore, significant elevations in these three proteins analyzed from prostatic fluid are indicative of carcinoma of the prostate as opposed to prostatitis or BPH. Hopefully, further studies will confirm that this is, indeed, an important diagnostic tool for early stage prostate cancer since preliminary reports have shown it to be as effective in detecting early stage disease as it is in confirming advanced prostate cancer.[11]

Of these three tests which should follow a positive rectal exam, the needle biopsy is the most definitive if it does, in fact, indicate carcinoma of the prostate. If the needle biopsy is negative, however, prostate cancer must not be automatically discounted. In the first place, 25% of prostate cancer appears in the anterior lobe

Figure 1



which is not palpable on rectal exam.[12] Secondly, a small focal lesion characteristic of early stage prostate cancer may be missed by needle biopsy.

Transrectal Ultrasonography

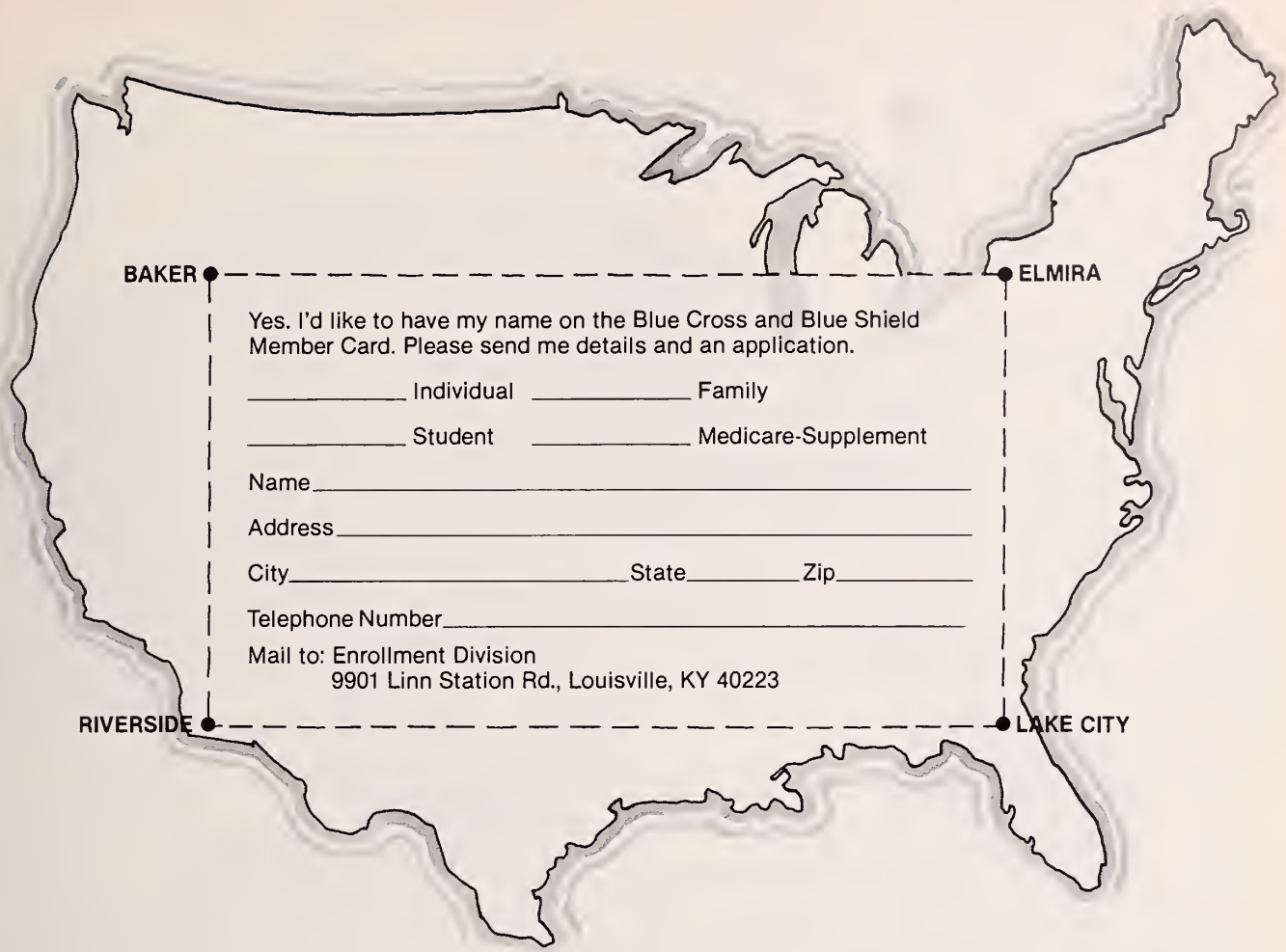
Due to the above mentioned problems with needle biopsy, it is suggested that a patient with a positive rectal exam (or chronic unexplained symptoms of prostatitis), who has a negative needle biopsy, be considered for transrectal ultrasonography. This relatively inocuous procedure utilizes an Aloka chair-mounted probe and allows ultrasonic scans of the pelvis to be obtained. This procedure has been reported to yield very accurate images of the prostatic capsule, and its future use has several important implications. First of all, it holds great promise in the actual staging of prostate cancer. The importance of accurate staging for carcinoma of the prostate has already been alluded to. Secondly, transrectal ultrasonography can detect lesions confined to the anterior lobe of the prostate gland, a traditional "blind-spot" for the clinician. Lastly, it may prove to be an acceptable method for screening potential prostate cancer patients. Though its use is still limited to experimentation, transrectal ultrasonography will undoubtedly take its place among diagnostic tests available to the physician in the near future.[13]

The data provided in the introduction point to the serious health problem that prostate cancer has created. Since its incidence is so widespread, and because it has traditionally been a late presenting disease, today's physician must be attuned to the latest techniques in identifying early stage prostate cancer; a point at which it is potentially curable by surgery.

Figure 1 is a schematic presentation of how the clinician might proceed in making a diagnosis of prostate cancer. As in other aspects of medicine, the entire clinical picture must be assembled and analyzed before an accurate diagnosis can be rendered.

Until an acceptable mass screening test is developed, the digital rectal exam will continue to be the focus of the clinician's efforts to detect cases of prostate cancer. Needle biopsy, prostatic fluid assay, prostatic acid phosphatase, and transrectal ultrasonography are all important techniques in confirming or discounting the initial impression obtained from the rectal exam. The conscientious application of these principles, coupled with further research into the diagnosis of early prostate cancer, will hopefully improve the prognosis of the 70,000 men who develop prostate cancer every year.

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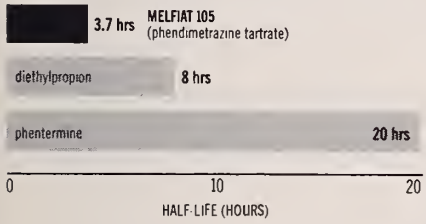


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PRECAUTION: Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine tartrate and the concomitant dietary regimen. Phendimetrazine tartrate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: Cardiovascular: Palpitation, tachycardia, elevation of blood pressure.
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Gastrointestinal: Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances.
Allergic: Urticaria.
Endocrine: Impotence, changes in libido.

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, e.g., excitement, stimulation and hyperactivity.

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Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Committee on Physicians' Health

PROFILE

Robert G. Cox

KMA Executive

FOR more than 20 years, Robert G. Cox has been involved in organized medicine. His primary concern is nuturing physician support for all levels of organized medicine. In addition his perspective on the operation of a medical association complements that of its members. As Executive Vice President of KMA, Mr. Cox coordinates all of the intricate mechanizations that comprise the KMA.

During his 20 years at KMA, significant changes have occurred. "I think the biggest change is one of growth. We had the one original building, on what was then called Janet Avenue, that we were so proud of. To us it was big. We had eight or nine employees. We felt that everything that could be done we were doing and there wasn't anything else a medical association would ever need to do. The budget was small but it seemed like a lot of money then. Now, not only has there been one major addition to this building, but another is in the planning stages. The number of employees has more than tripled and of course the budget has increased to allow for all of the many necessary changes. Instead of having the KMA as 'the' organization contained in the walls of this building, we now operate close to 10 separate entities, some of them major ones like the Kentucky Medical Insurance Company and the KMA Insurance Agency."

Higher quality of care, elimination of disease and increased life spans are areas in which organized medicine has played a role, believes Mr. Cox. "Representation of medicine is now more important than ever before and it's more widespread. We are right now on the horizon of what must be an accelerated partnership between industry and medicine. KMA has taken a leadership role in this field but we must expand and fine tune our efforts."

Problems facing physicians have continued to evolue during the past 20 years. The two that seem to linger the most come from government intervention and the attempt by nonphysician health personnel to practice medicine through legislative measures. "The biggest problem we are facing from government intrusion is no longer health insurance as we know it, but what is now called 'competitive medicine.' We are certainly in favor of competition, but not when it is regulated by the government. It boils down to being able to provide quality care at the most reasonable cost. Government involvement in this area is notably poor. There is also a great influx into the medical field by those practicing on the fringe of medicine and the government is fostering competition in these areas also. Solving these problems will take a lot of direction and leadership from KMA."



Vice President



Direction and leadership must come from active members of an association. There has been concern lately, particularly from the AMA, about dwindling membership. "We are not losing membership," explains Mr. Cox. "Membership is not increasing at the same rapid rate as in the past though. The AMA, being at the national level and furthest removed from the individual physician, suffers the most. I'm a strong believer in the federation concept of medicine and support strong physician involvement at the county, state and national levels. At the state level, we are not achieving as high a percentage of increase of members as 10 or 15 years ago. The reason? There are more physicians. They are harder to reach. We do have more members. Every year we set a new membership record. But I'm convinced we are missing more each year. To address this we have developed new automated record procedures and in the near future we are going to be able to identify every physician in Kentucky. We will be able to systematically contact them and invite them to become members of KMA."

Once contacted, the Association must convince them how valuable membership is to a physician. Frequently dues are a prime consideration. "I don't think that physicians are as concerned about the amount of their dues as much as they are concerned about what they receive for them. This may be where we sometimes fall short. We work here everyday at KMA headquarters and see all that is being achieved for physicians. The physician in his office though might not be aware that the advantages that allow him to carry out his daily practice are a result of what has gone on here at KMA."

More than 18 years ago KMA initiated a dues program that would allow an increase in dues only once every five years. The last dues increase took place in 1975. With the adoption of the July 1982-June 1983 budget, eight years of operation have occurred without an increase. "We will not have a dues increase this coming year and depending on how things go, we may not have to increase dues for three or four more years. We don't want our financial situation to get in a position where it would be necessary to have a major increase. KMA has a good reserve fund which helps generate money as well as a dues increase would. When it is time to ask physicians for an increase there won't be undue concern."

Last year AMA conducted a survey and KMA was one of the two states that had operated the longest without a dues increase, according to Mr. Cox. He goes on to explain that management of finances is really a new role for medical executives because of the demands put on Association funds. "In the old days all we had to know how to do was add and

subtract. Today we have to get involved, go to school and learn as much as possible about investment strategies."

One of the most rewarding experiences Mr. Cox says he enjoyed recently was serving as President of the Professional Convention Management Association (PCMA). He encourages KMA executive staff to become involved in organizations outside of the KMA. "I think that some of the best 'growing up,' if you will, that executives and nonexecutives can do is to be involved in organizations and seek leadership roles in them."

Mr. Cox admits that he certainly got an "ego trip" from being a member of PCMA and the American Association of Medical Society Executives (AAMSE). He quickly points out that the benefits are extremely significant. "These two organizations offer the very best teachers and material to their members. What we learn at a meeting may not be used immediately when we get back to the office. Eventually though ideas learned at the meetings will be put into effect. The Association is going to be repaid many times for whatever it costs to send someone to these meetings."

Another advantage of his membership in PCMA is his acquaintances with health care exhibitors who meet with KMA during the Annual Meeting. Each year 85 exhibitors fill the exhibit hall at the KMA Annual Meeting. Each year there is also a waiting list from additional exhibitors. Many states, some much larger than Kentucky no longer feature this attraction at their annual meeting. He explains, "As budgets are being cut, exhibitors have to decide which states to eliminate. I want to be sure Kentucky isn't one of them. To me an exhibition hall is part of the convention atmosphere. Once we start losing any part of what makes KMA's meeting so famous nationwide, we will hurt ourselves on attendance. Close to 50% of Kentucky physicians attend our Annual Meeting, more numerically than attend meetings in three or four of the largest states. As long as this percentage remains high exhibitors will continue to come to Kentucky. They like it here because they can see at least half of the physicians in the state without sending someone up and down the highways."

Besides being past President and Director of the Board of PCMA, and a member of AAMSE, Mr. Cox has been asked by the AAMSE nominating committee to run for President-elect at its convention in August. If elected, Mr. Cox would be only the second person to have achieved the distinction of being president of both medical executive organizations.

Reflecting over the last 20 years, Mr. Cox is proud of KMA's achievements: increased representation with the government; more contact with the public and representation with third party payors; allied medical groups and industry. "Sometimes you wonder about what else could have been done that wasn't. My one concern over the years has been about government programs like Medicare and Medicaid. The KMA and AMA felt that Congress was overlooking the Medicaid program when it instituted Medicare in 1965. We thought that Medicaid would turn into a real problem and it did. It seems to increase each year. Somewhere along the way we should have made a stronger effort to voice those concerns and even have sat down with the right people for a week or month or however much time was necessary to design some kind of effective program for the medically indigent in this country."

As chief executive officer of KMA, Mr. Cox admits to being a little concerned about being interviewed for the Journal. "I think if I ever had one philosophy on being a medical executive it's that organizing, planning and working should be done in the background. It is best to let physician leadership be recognized. Actually, I thought the only times it would be appropriate for me to be in the *Journal* was when I first joined KMA staff (they published a picture of this little skin-headed fellow) and perhaps when I departed this earth. Those are the only two times I thought I would be mentioned."

When Mr. Cox was first hired at KMA his title was executive assistant. He describes his early career as a "jack of all trades." "It wasn't too difficult except during the Annual Meeting. We were staying at the Kentucky Hotel and meeting at the convention center. I had to run back and forth across Walnut street all the time carrying signs for the meetings. It was good training though. I worked in all areas. We were not specialized then like we are now."

In August of 1982, Mr. Cox will have worked for KMA 20 years. He was actually hired in July 1961, but the weekend before he was to begin he was called back into the armed services during the Berlin Crisis. "After my interview at KMA, my wife, Kay, and I were so excited about my being hired that we decided to drive to Owensboro for the weekend, taking Journals and copies of bylaws and other things to show my parents what I would be doing starting Monday. We were close to the West Point area when an announcement on the radio said everyone had been called to active duty."

Golf is one hobby that Mr. Cox shares with his wife. In addition to golf, Mr. Cox says his wife's other



"hobby" has been running the family and taking care of their two children.

Their older, Barbara Ann, is a freshman at U of K majoring in business. She is very sports oriented and was quarterback for her dormitory football team at U of K. She would like to find a job in a hospital emergency room interviewing patients for admittance because she likes working with people and is considering a career in the health care area.

John, their son, is a freshman at Eastern High School. He is also interested in athletics. He plays football, baseball, basketball and tennis. Mr. Cox says that John will be much taller than he is. "He's already 5'11" and I have to stretch to say I'm 5'7"."

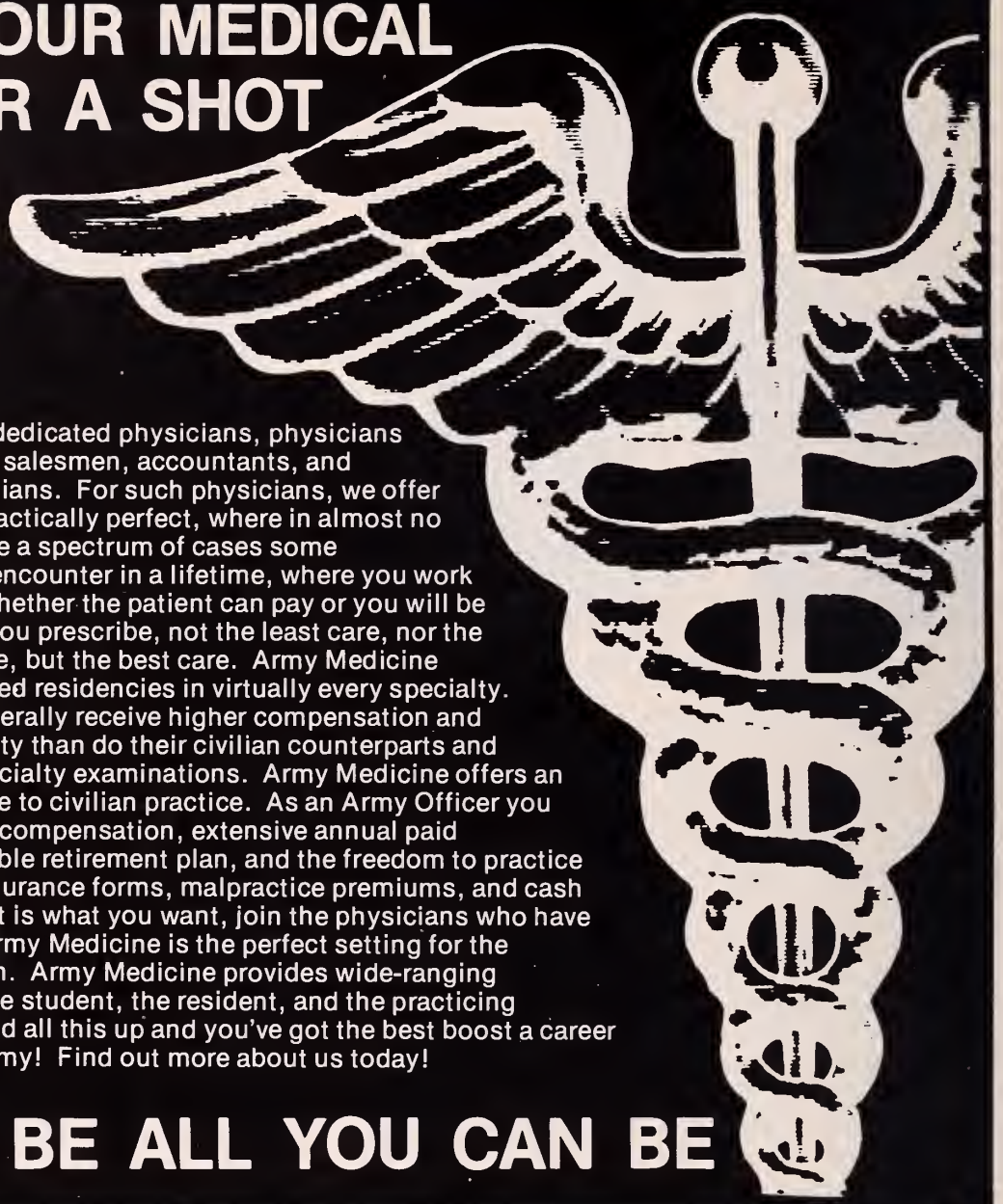
Building lasting relationships with the individuals he has worked with during the last 20 years is one of the most rewarding benefits from being Executive Vice President of KMA. "Many of my close friends are physicians. As I work with them I get strong feelings for them as individuals, and as a majority I have become aware of physicians' commitment to their profession and patients. If you were to ask me, though, what my best asset is after 20 years at KMA, I would have to say it is the KMA staff. I have seen medical association staffs all across the country and I assure you I wouldn't trade ours for any other. We have the best and I'm proud of it."

As Mr. Cox speculates on the future, he emphasizes the changing role of medical associations. More will have to be done for physicians in the area of economics, he believes. "We'll have to be ready to help every member in all types of practices. We will get more into office management, marketing the physicians' services and patient/physician relations. it comes down to some good old-fashioned methods and new approaches on how to sell yourself and your practice."

With all of the innovative changes taking place, Mr. Cox quickly points out that those things that don't change are just as important, if not more so than those that do. "The private practice of medicine still exists, and without organized medicine I don't think this would be true. Inroads have been made into our freedom, but the vital organs have been preserved."

Text and Photographs by Donna M. Young

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SPECIAL ARTICLE

Demographics of a Board Review Continuing Education Course for Family Physicians

James E. Redmon, M.D., Gerald D. Swim, and Roger A. Bell, Ed.D.

Continuing Medical Education (CME) has been with us for many years although it has not been until the 1970's that its prominence has made such an impact on educators, physicians, nurses, allied health personnel and even the lay public—the recipients of medical care. But what is CME? "For our purposes, we will define CME as the last, and the longest, of the three phases of the continuum of medical education:

1. the undergraduate medical education (medical school);
2. graduate medical education (internship, residency, specialty fellowship);
3. continuing medical education (practice).

CME encompasses a wide variety of activities, usually of relatively short duration, designed to maintain or upgrade existing knowledge and skills. The vast majority of CME activities are comprised of group instruction (courses, seminars, workshops) and are sponsored by a number of different institutions: medical schools, hospitals, local and state medical societies, medical specialty societies, voluntary health agencies, and others."[1]

The students in CME are physicians who have completed their undergraduate and graduate medical education. CME, as defined, is a major topic of concern for physicians, educators, and legislators especially with regard to its effectiveness, need, and evaluation. All of these concerns relate to a single entity: physician acceptance.

What type of physician attends these courses? What are their attitudes toward continuing education and how would they like to be taught?

In this paper we will discuss the type of physician who attends these courses, their attitudes toward continuing medical education, and preferences toward methodologies of teaching. These topics will be discussed within the framework of a board review continuing medical education course specifically designed to present an overview of family practice, although not all inclusive, with emphasis on basic review and an update on clinical disease and its diagnosis and treatment.

From the University of Louisville School of Medicine, Louisville, KY

Methods

The University of Louisville Department of Family Practice, along with the Division of Continuing Medical Education, sponsors a yearly program of continuing medical education for family physicians. This 50 hour CME course has dual approval from both the American Academy of Family Physicians and the American Medical Association. The overall goal of the course is

> ". . . to provide a comprehensive review for the family practitioner interested in the latest practical advances in medical care. It will also be an intensive and stimulating refresher course for those who intend to sit for the examination of the American Board of Family Practice."

Since this is effectively a "review course," various specialties of family practice (eg, psychiatry, pediatrics, internal medicine, obstetrics and gynecology and surgery), are covered in block sessions of approximately four hours each throughout the review course with emphasis on recent advances in the diagnosis and treatment modalities of various disease processes. The primary instructional mode is a 30-minute didactic or instructive lecture that attempts to outline recent advances concerning particular disease processes. A syllabus with notes and bibliographies from individual lecturers is provided to the attendees of the conference.

Faculty for this course are drawn primarily from the various departments of the University of Louisville School of Medicine, although several nationally known physician-educators serve as keynote speakers. Approximately 40 speakers from the University of Louisville and five speakers from other medical centers are used annually at this conference.

A current example of this course is the Third Family Medicine Review which was held from August 14-18, 1978, approximately two weeks prior to the Family Practice Board Certification Exam. Advertisements in several national magazines were used to

publicize the conference. A mailing of approximately 11,000 brochures to family physicians in the states adjoining Kentucky, as well as the entire southeastern region of the United States was also used.

A total of 110 family physicians from 22 states attended this board review course. Daily evaluation sheets regarding the days' topics were distributed to the participants for ongoing evaluation of this course. Overall, the course received very good marks as far as content and presentation. In December of that year, after the results of the board exam were announced, all participants of the review course were mailed a questionnaire which they were asked to fill out and return in a stamped self-addressed envelope. Also stamped self-addressed post cards were included for separate mailing to us for those interested in receiving a report of the compiled questionnaire results. A single mailing was used. Sixty physicians (54%) responded to the questionnaire and some 39 (35%) physicians requested results of the study to be mailed to them.

Results

The results of this study can be divided into three parts: 1) demographics of physicians attending this meeting, 2) the perceived needs of the physician participants, and 3) data and inferences regarding the attitudes of the physician participants in regard to CME in general. A point that must be taken into consideration is that 1978 was the last year of the "Grandfather Clause," or the last year that successful completion of a three-year residency training program in family practice was not a prerequisite for taking the board exams.

Demographics

The physician participants in this course came from 22 states from Maine to California, although most came from Kentucky and the states surrounding it. Several states, including Indiana, Florida, Kentucky, and Ohio, were represented by 10 or more participants. The physicians' ages ranged from 31 through 68 years, with a mean age of 49. Most of these participants came equally from communities of under 10,000 population or greater than 50,000 population with relatively few from towns between these sizes. Ninety percent of the participants had attended CME courses from the previous year which is significant, in that, only 45% were residents of states requiring CME for relicensure. Only about 6% of the attendees were graduates of residency training programs and no residents-in-training actually registered for the course. Approximately 60% of the attendees were board certified.

Needs

In the questionnaire, the physician participants were asked to rate on a scale of one through five (one, being the least important, and five, being the most important) their reasons for attending the conference. The highest priority (mean = 4.36) was the perceived need of a refresher course with 57% of all physicians listing this as one of their most important reasons for attending. Fully 50% of the participants listed as one of their most important reasons the need for a review for the board exams, although 27% of the participants found this particular need not applicable to them. A large number of physicians attended this course because of a need for CME credit hours (3.76) with 33% of physician attendees seeing this as one of their most important reasons. Other reasons, such as attraction to the Louisville area, having friends or relatives in Louisville, were less important to the attendees.

Attitudes

Finally, the physicians were asked about their attitudes regarding CME, the value of this particular course, and questions regarding common teaching vehicles. Again a scale from one through five was used, with one representing complete disagreement and five being total agreement with a given statement.

Regarding CME in general, most physician attendees felt that it was important (mean = 4.48), with 63% giving it the highest priority opinion. A lesser opinion of mandatory CME, however, was expressed (mean = 3.48). Fully 37% of those responding totally agreed with the concept of CME, although 30% felt neutral on this subject and 15% totally disagreed. Concerning whether or not these physicians would attend CME even if it were not mandatory, 66% strongly agreed that they would attend CME courses even if it were not mandatory (mean = 4.42).

Regarding this particular course, the physician attendees felt that it did meet their needs. Although 35% of the physicians attending this course did not plan on taking the boards, 50% of those who took the boards totally agreed that this course helped them with the boards (mean = 3.92). Moreover, the physician attendees felt this really helped their day-to-day clinical practice (mean = 3.91) with 44% rating this maximally.

The physician attendees were surveyed regarding specific teaching modes they preferred for review courses. Several points were striking. Testing with respect to the review course was not felt to be satisfactory. Both pretesting and posttesting were most strongly disfavored by 43% of the physician attendees

and had means of 2.39 and 2.51 respectively. Case presentations were also in disfavor with a mean of 2.42, as were presenting indepth talks and the provision of designated question and answer sessions, both of which had means of 2.58. Panel discussions were mildly favored (mean = 3.33). By far the most favored type of presentation were the short didactic talks with emphasis on the most pertinent new material (mean = 3.83).

Discussion

Overall, the physicians attending this particular review course were generally physicians in mid-career. Most were attending CME courses regularly although their particular states did not require CME. It must be noted that the American Academy of Family Physicians had a relatively stringent CME requirement of 150 hours per three years at that time.

What were the attitudes of these physicians toward CME? Libby, Weinswig and Kirk state that, "Continuing education should mean continuing self-education, not continued instruction."[2] They believe this is the best method of adult education. However, from our study, most physicians view CME as a good thing. They see it as valuable to them both in their clinical practice and as an adjunct to an increase in cognitive knowledge (*ie*, thought that it improved test scores). It must be remembered, however, that our data relate to a general review course that was specifically designed for these purposes.

Moreover, from our data, physicians feel that CME is important and most indicated that they would attend CME whether it was mandatory or not. Indeed, our data is collaborated with the findings of Stross and Harlan who felt that family practitioners and physicians in other specialties preferred short instructional courses of one-five days as the most valuable source of CME, well above such self-study as journal and textbook readings.

Moreover, from our questionnaire, physicians were more attuned to such instructional techniques as didactic lectures on specific topics rather than less structured vehicles such as question and answer sessions, panel discussions, and case presentations.

Another interesting point concerning CME is the value of pretesting and posttesting. Overall, the majority of our physician attendees viewed this with disfavor. In fact, one participant even penciled in on the questionnaire regarding this topic, "I don't like playing games." Many possibilities could relate to this repudiation of testing. Physicians, as a rule, are very time-oriented and, therefore, might feel that testing merely takes time away from the didactic instructional components of the course. Another possibility might relate to the reasons why the physicians attended this course which were to further their clinical expertise or to prepare for the certification exam. If a physician was attending to increase his clinical expertise, he/she might rationalize that the desired improved results from this course would be evidenced in the improvement of his/her patient care. A physician attending to better his/her chances on a certification exam might rationalize that to be the ultimate exam to test his/her overall increase in knowledge. Whatever the reasons, physician participants of this course disliked pre and post testing. It must be remembered that this is a study of physician attitudes based on a consensus of opinion and no attempts were made to verify their opinions statistically. Indeed, few studies of that sort have been accomplished due to the difficulty in designing such a project.

A topic which has been very controversial is that of mandatory CME. Many opinion papers have been generated regarding this subject. Libby, Weinswig and Kirk maintain that mandatory continuing education is inappropriate and ". . . will inevitably alienate the health practitioner from all forms of continuing education."[2] Many physicians have been outspoken on the subject—in editorials to various professional magazines. But how do the majority of physicians feel about mandatory CME? Our study seems to indicate that the majority of family physicians do indeed favor mandatory CME, although a small minority are diametrically opposed to the concept. This data is in accordance with the study of Stross and Harlan who found that 75% of the 497 physicians of multiple specialties they studied favored CME.[3] A study of 645 psychiatrists by Teigelson and Frosch also corroborates this favoring mandatory CME.[4] We believe that many physicians indeed favor mandatory CME, simply because it ensures that all physicians do participate in CME, and therefore are theoretically improving their ability toward health care.

Summary

Using a defined structure of CME—the refresher course—family physician attendees were surveyed as to their attitudes regarding the course in that it helped them in their clinical practice and that it increased their cognitive knowledge as reflected in their attitude toward their performance on board examinations. These physician attendees favor conventional didactic lectures as a vehicle of learning as opposed to panel discussions, question and answer sessions, and case presentations. These physicians fa-

vor mandatory CME even though they would attend courses even if not required of them. Family physicians are interested in CME and will attend these functions, but efforts for evaluation must be continued and improved to ensure that CME remains a worthwhile entity.

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Cyclapen®-W (cyclacillin)

Indications
Cyclacillin has less in vitro activity than other drugs in the ampicillin class and its use should be confined to these indications: Treatment of the following infections:
RESPIRATORY TRACT
Tonsillitis and pharyngitis caused by Group A beta-hemalytic streptacacci
Branchitis and pneumania caused by *S. pneumaniae* (farmerly *D. pneumaniae*)
Otitis media caused by *S. pneumaniae* (farmerly *D. pneumaniae*), *H. influenzae,* and Graup A beta-hemalytic streptacacci
Acute exacerbatian af chranic branchitis caused by *H. influenzae**
*Thaugh clinical impravement has been shawn, bacterialagic cures cannat be expected in all patients with chranic respiratary disease due ta *H. influenzae.*
SKIN AND SKIN STRUCTURES (integumentary) infectians caused by Graup A beta-hemalytic streptacacci and staphylacacci, nanpenicillinase praducers.
URINARY TRACT INFECTIONS caused by *E. cali* and *P. mirabilis.* (This drug shauld nat be used in any *E. cali* and *P. mirabilis* infectians ather than urinary tract.)
NOTE: Perfarm cultures and susceptibility tests initially and during treatment ta manitar effectiveness af therapy and susceptibility af bacteria. Therapy may be instituted priar ta results af sensitivity testing

Contraindications Cantraindicated in individuals with histary af an allergic reactian ta penicillins.

Warnings Cyclacillin should only be prescribed for the indicotions listed herein.

Cyclacillin has less in vitro activity than other drugs of the ampicillin class. However, clinical trials demonstrated it is efficacious for recommended indicotions.

Serious and occasional fatal hypersensitivity (anaphyloctoid) reactions have been reported in patients on penicillin. Although anaphyloxis is more frequent following parenteral use, it has occurred in patients on oral penicillins. These reactions are more apt to occur in individuals with history of sensitivity to multiple allergens. There are reports of patients with history of penicillin hypersensitivity reactions who experienced severe hypersensitivity reactions when treated with a cepholosporin. Before penicillin therapy, carefully inquire about previous hypersensitivity reactions to penicillins, cepholosporins and other allergens. If allergic reaction occurs, discontinue drug and initiate appropriate therapy. Serious anaphylactoid reactions require immediate emergency treatment with epinephrine. Oxygen, I.V. steroids, airway management, including intubation, should also be administered as indicated.

Precautions Pralanged use af antibiatics may pramate avergrawth af nansusceptible arganisms. If superinfectian accurs, take apprapriate measures.
PREGNANCY: Pregnancy Categary B. Repraductian studies perfarmed in mice and rats at dases up ta 10 times the human dase revealed na evidence af impaired fertility ar harm ta the fetus due ta cyclacillin. There are, hawever, na adequate and well-cantralled studies in pregnant wamen. Because animal repraductian studies are nat always predictive af human respanse, use this drug during pregnancy anly if clearly needed.
NURSING MOTHERS: It is nat knawn whether this drug is excreted in human milk. Because many drugs are, exercise cautian when cyclacillin is given ta a nursing waman.

Adverse Reactions Oral cyclacillin is generally well talerated. As with ather penicillins, untaward sensitivity reactians are likely, particularly in thase wha previausly demanstrated penicillin hypersensitivity ar with histary af allergy, asthma, hay fever, ar urticaria. Adverse reactians reparted with cyclacillin: diarrhea (in appraximately 1 aut af 20 patients treated), nausea and vamiting (in appraximately 1 in 50), and skin rash (in appraximately 1 in 60). Isalated instances af headache, dizziness, abdaminal pain, vaginitis, and urticaria have been reparted. (See WARNINGS) Other less frequent adverse reactians which may accur and are reparted with ather penicillins are anemia, thrambacytapenia, thrambacytapenic purpura, leukapenia, neutrapenia and easinaphilia. These reactians are usually reversible an discantinuatian af therapy.
As with ather semisynthetic penicillins, SGOT elevatians have been reparted.
As with antibiatic therapy generally, cantinue treatment at least 48 ta 72 haurs after patient becames asymptamatic ar until bacterial eradicatian is evidenced. In Graup A beta-hemalytic streptacaccal infectians, at least 10 days' treatment is recammended ta guard against risk af rheumatic fever ar glamerulanephritis. In chranic urinary tract infectian, frequent bacterialagic and clinical appraisal is necessary during therapy and passibly far several manths after. Persistent infectian may require treatment far several weeks.
Cyclacillin is nat indicated in children under 2 manths af age.
Patients with Renal Failure Cyclacillin may be safely administered ta patients with reduced renal functian. Due ta pralanged serum half-life, patients with variaus degrees af renal impairment may require change in dasage level (see DOSAGE AND ADMINISTRATION in package insert).
Dosage (Give in equally spaced dases)

INFECTION	ADULTS	CHILDREN*
Respiratary Tract		
Tansillitis & Pharyngitis	250 mg q.i.d.	body weight < 20 kg (44 lbs) 125 mg t.i.d.
		body weight > 20 kg (44 lbs) 250 mg t.i.d.
Branchitis and Pneumania		
Mild ar Maderate Infectians	250 mg q.i.d.	50 mg/kg/day q.i.d.
Chranic Infectians	500 mg q.i.d.	100 mg/kg/day q.i.d.
Otitis Media	250 mg ta 500 mg q.i.d.†	50 ta 100 mg/kg/day t.i.d.†
Skin & Skin Structures	250 mg ta 500 mg q.i.d.†	50 ta 100 mg/kg/day†
Urinary Tract	500 mg q.i.d	100 mg/kg/day

*Dasage shauld nat result in a dase higher than that far adults.
†depending an severity

How Supplied Tablets 250 mg and 500 mg in battles af 100. Oral Suspensian 125 mg and 250 mg per 5 ml in battles ta make 100 ml and 200 ml af Suspensian.

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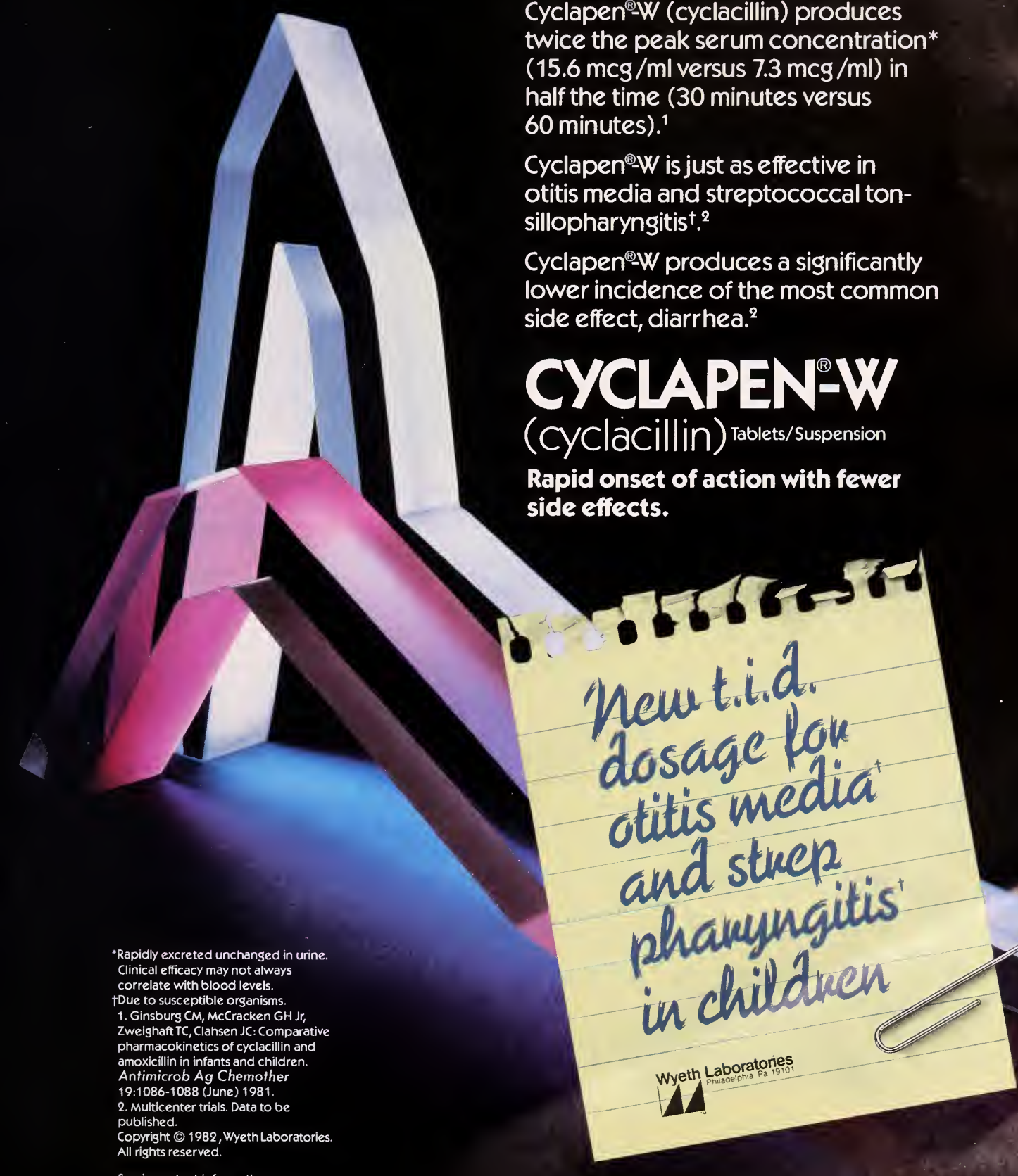
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Cyclapen®-W produces a significantly lower incidence of the most common side effect, diarrhea.[2]

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1. Ginsburg CM, McCracken GH Jr, Zweighaft TC, Clahsen JC: Comparative pharmacokinetics of cyclacillin and amoxicillin in infants and children. *Antimicrob Ag Chemother* 19:1086-1088 (June) 1981.
2. Multicenter trials. Data to be published.

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See important information on adjoining column.

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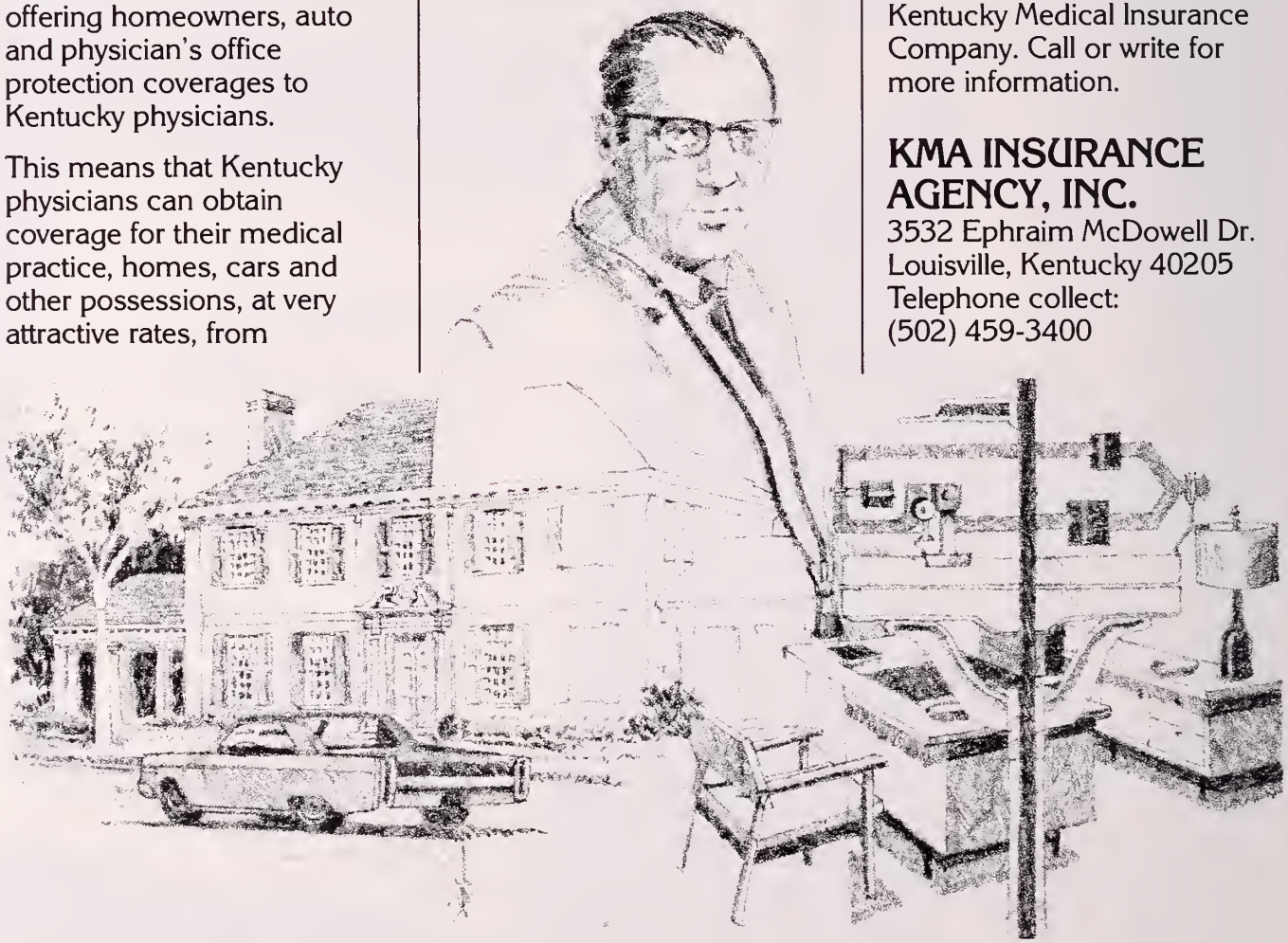
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1982 Annual Meeting **Kentucky Medical Association**

Hyatt Regency/Lexintgon Center **Lexington, Kentucky** **September 21, 22, 23**

1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

 Address _____

 Professional title _____

3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____
 (The draped booth has 4' side walls. This footage should not be included in backwall footage required.)
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5. Will summray printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

7. Has this exhibit been displayed before? If so, when & where? _____

8. It is required that you attach a rough sketch or photograph and a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used.

Date _____ _____
Signature of Applicant

Fill Out and Mail to:

RICHARD A. KIELAR, M.D., Chairman
Scientific Exhibits Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

Applications for space should be received before June 1, 1982.

- **KMA provides, without cost to the exhibitor, one 2 ft. Table as shelving, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 818 West Main Street, Louisville, Kentucky 40202.**
- ***Commercial* exhibit materials and handouts are prohibited in the Scientific Exhibit area.**
- **Transportation and erection costs are the responsibility of the exhibitor.**
- **Exhibit must be attended during intermissions to answer physicians' questions. It is also desirable to have someone in attendance throughout the program.**
- **Equipment which will create noise must not be used during the general sessions and, at other times, must be controlled by head or earphones or a muffling device.**

ACCREDITATION

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.

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Sept. 20-23, 1982
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KMA Auxiliary will offer a CPR (cardiopulmonary resusitation) course Wednesday, Sept. 22.

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BOOK REVIEWS

Stephen Z. Smith, M.D.
Assistant Scientific Editor

Exploring Medical Ethics

Henlee H. Barnette, Mercer University Press, 1982, 171 pages

Professor Barnette, emeritus Professor of Christian Ethics, at the Southern Baptist Theological Seminary and presently Clinical Professor of Psychiatry and Behavioral Sciences at the University of Louisville, discusses some 12 popular ethical issues before contemporary medicine. Certainly trailblazing when he deals with in-vitro fertilization, surrogate motherhood, and genetic engineering, the author seems well experienced and read in the medical milieu. Other issues, such as decision making, physician-patient relationships, homosexuality, suicide and death are familiar to the reader who has read other ethics works. Each subject is introduced with some definitive material, often laced with statistical support and current psychiatric dogma. Woven into this framework are frequent Biblical and other types of religious references, maintaining an ecumenical approach. Professor Barnette takes a stand on the issues, then in a paternal thrust of his hand, he offers the readers sanctuary in their disputes with him. Obviously such a gentle approach to controversy may fail to jar the reader from complacency, but this risk is worth the warm feeling of reading the book.

Very useful appended features are the Hippocratic Oath, physicians daily prayer, Catholic ethical and religious directives, Patient Bill of Rights, Ad Hoc Committee Definition of Brain Death, and the Living Will.

Recognizing the author's background and the design of the book, the physician may well take note of another point of view.

Coping in Medical School

Bernard Virshup, M.D., Health Sciences Corsortium, Inc., 1981, 130 pages

This book attempts to give the medical student a method of auto-individual therapy. Apparently we readers are to remember a series of questions which introduce virtually every paragraph and section, and subsequently address ourself to the answer or to alter a pathologic approach. Coping is the umbrella term under which needs, responsibility, identity, self-esteem, guilt, security, ambition, creativity, stress tolerance, anger and depression are addressed. Compressed into 130 pages are these topics which frequently command their own volumes. Yet this book does not claim to be ecumenical; rather this is one man's approach to psychologic health.

Considering the annual reminder of how many physicians are impaired and to the degree to which failure to cope is a contributing factor, this book is certainly timely, if not dogma.

Something Hidden—A Biography of Wilder Penfield

Jefferson Lewis, Webcom Limited, 1981, 311 pages

If you like biography and feel the emotion of an ancestor lovingly describing his heritage, "Something Hidden" will be your roommate for a short sojourn. Better known than any topographical map, the Penfield brain has become to the student an indelible guide through the central nervous system function. Wilder Penfield's unique life story and the role of his own maturing philosophy make this reading a fascinating experience. A household word to the neurosurgeons, Dr. Penfield forged a hitherto unrecognized area of research and technical development. Masterful surgeon that he became, he was able to ward off detractors and create legions of loyal disciples in the surgical and medical practice of neurology. This book is a chronology starting with the busy details of early Wisconsin life. The juxtaposition of family dedicated to accomplishment and the intellectual atmosphere of his intimates seemed perfect chemistry for the growing mind. The pace of the book, at times hectic in trying to cover his multifaceted life, reflects the busy man that he was.

His pre-eminence arose from his leadership in surgical correction of epilepsy. Pioneering neurosurgery in Montreal, a city without a neurosurgeon before him, he built the Montreal Neurological Institute around him and his colleagues. Thus insulated and fueled with patients from all places, he began investigating the brain's function. From these early experiments and molded by his strong Christian faith, he took issue with the scientific community about the analysis of the conscious mind. This dichotomy of thought, the interplay of scientific and religious, is referred to throughout the book. Apparently Dr. Penfield wanted his legacy to be emulated as much as any of his others.

Although both admired and disliked by those who knew him, Dr. Penfield is obviously the subject of great loyalty by the author. Dr. Penfield is often shown in a humane picture, which certainly was shared by his many patients and students.

This is an interesting book. For the student, Dr. Penfield is certainly a role model. For the historian, his place is secure.

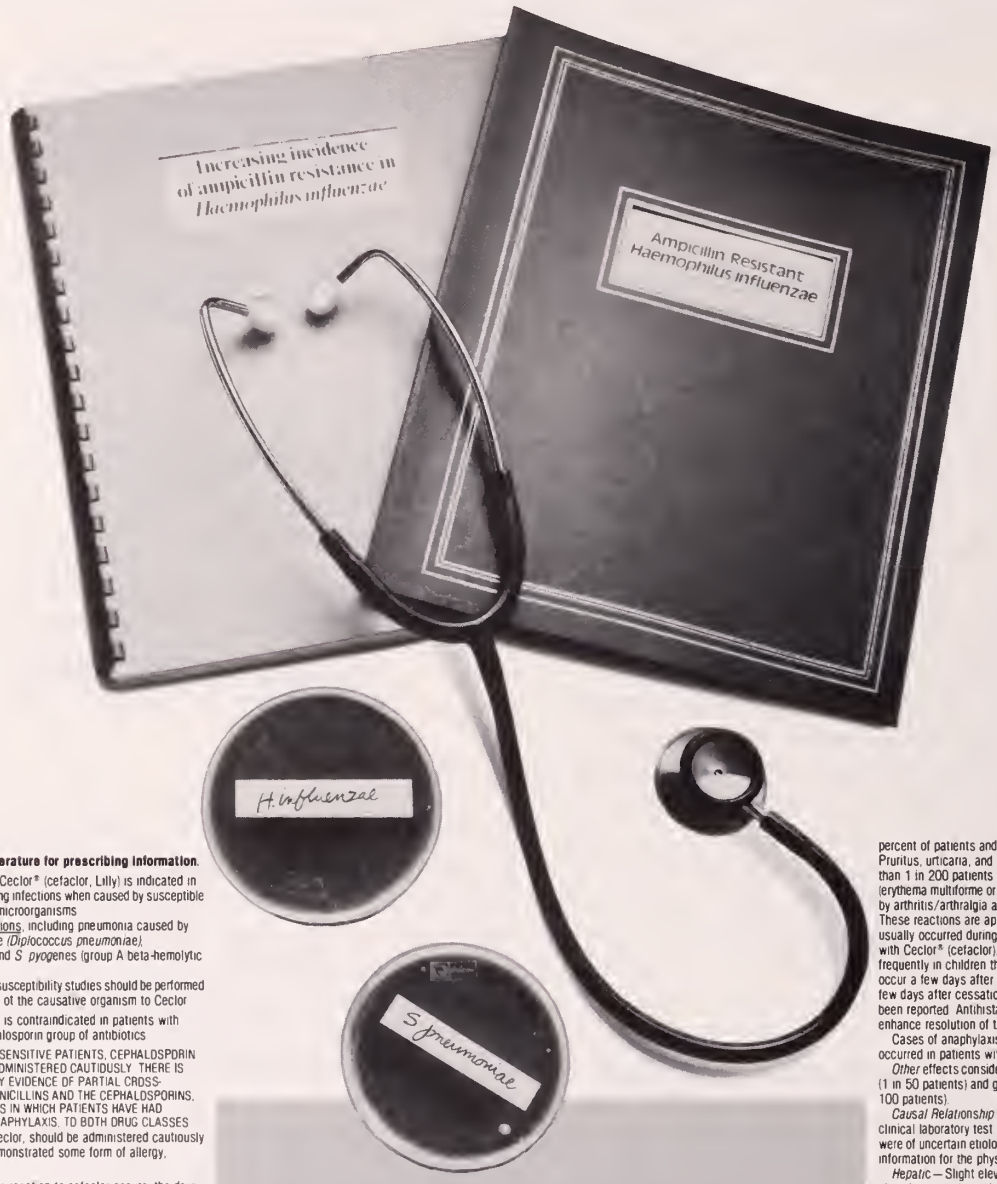
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An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

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Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). (100281R)

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

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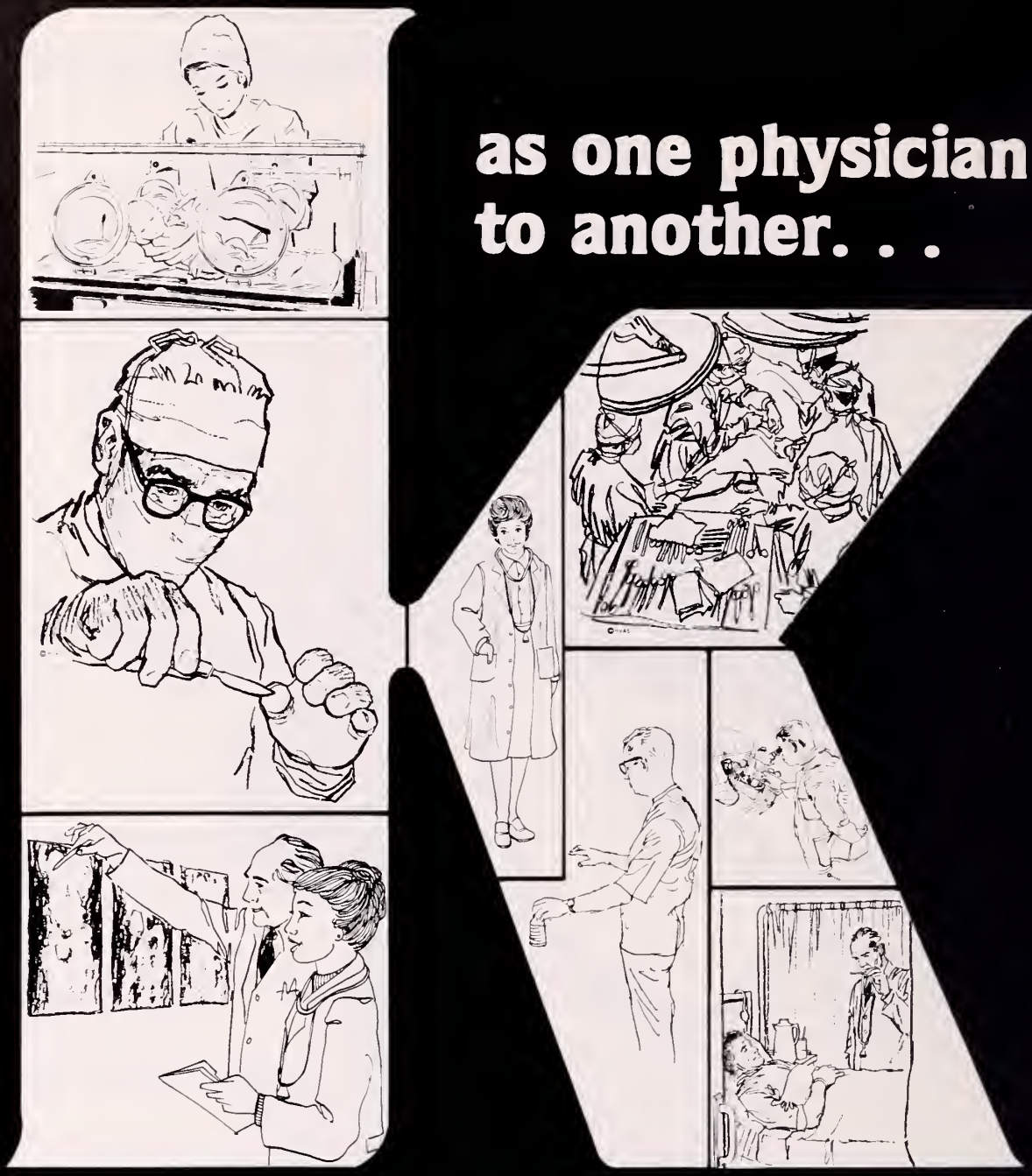
EDITORIAL

THE relationship of the poor and the medical community seems to be undergoing its spring cleaning. Those of us educated in the public schools begin to interact with several social and economic castes, and unless immune, will inevitably see the problems ahead. Our subsequent medical education is partly composed of learning and refining our skills on patients who filter down the medical care path to training center clinics. Dismembering our prejudices and softening our hardened emotions, these interactions with patients as human beings and as possessors of families and friends become instructional and most influential. Realities of starting a personal life outside the medical family demand that we set for ourselves economic stability if not continuing opportunity. Yet this earlier marriage to the less fortunate, this gratitude for their trust in our maturing hands, does not suffer divorce easily. Despite their disenfranchisement from the recognizable power structure, these people demand from us an ongoing respect for their human needs. Organized as we are into a federation of state partners, we continue to hear about and take action on developing programs for providing equitable medical care. Of course, we should not be excused from giving to the poor of our medical skills on a regular basis. Herding the poor into programs where their uniqueness is recognized only by the differences in the six-nine digits on a card seems unpalatable. Bureaucracy in such programs is onerous and often inhibits adequate or acceptable remuneration to participating physicians. The same arbitrary judgements that fail to honor different needs of the people also result in perplexing disrespect to our usual and customary fees.

Added to this disharmony is the advent of the recessionary economy. Without the publics transfusion of financial support, these programs are dying by inanition. Schemes of making medical care to the poor our tax deduction ignore those of us whose practice is dependent on present reimbursement programs. Burdening the tax system in our taxpayer-sensitive country is risky and probably dangerous.

No acceptable candidates are barnstorming for the job of taking care of the medically deprived. We individual practitioners will be called to bear part of the responsibility, but our debt to these people has not been forgiven. The same enthusiasm engendered by patients who are able to reward us financially for our services should be extended to those who cannot.

Stephen Z. Smith, M.D.



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LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

Two letters and one editorial comment followed the appearance in the August 1981 issue of the special article by Doctors Kay Clawson and T. L. Leigh describing the selection process for medical school applicants. I felt compelled to make some response. As a practitioner for more than 20 years in a rural community in Kentucky and now for nearly seven years on the faculty of one of our medical schools, I feel that I can see and appreciate some of both sides of this question.

I certainly agree with a number of the observations made by each of the commentators but also find that some of the statements sought an oversimplification of a more complex process.

I, too, was somewhat shocked when I first learned that a number of applicants were offered positions in a class without having personal interviews. However, after making some inquiry about this I found that this is anything but a blind selection process depending on numbers alone. It is true that most of these applicants have excellent academic records but they must be outstanding in other ways to be considered for early admission. Doctor David Stewart observed that it is difficult to form opinions based on brief interviews and that belief is certainly echoed by those involved in the interviewing process. The letters of recommendation most closely perused are those from college faculty who have observed these students for an entire four years and have a much better basis of evaluation than an interviewer who does not know the student. Since these applicants are generally outstanding in all areas it is apparent from the activities in which they have engaged throughout their lives whether they possess the qualities accepted by most people as desirable in the ideal physician. After this inquiry I was able to accept the fact that there are a small number of truly outstanding applicants to each class whose characteristics are attested to by faculty members who have observed them when things go well, when under stress, and in their interpersonal relationships with fellow students and faculty, and are able to make some assessment of their committment to their chosen career. It should be pointed out that these students are just as likely to remain and practice in rural Kentucky as those from the larger interviewed pool.

The statement in the letter by Doctor Lowry prompts me to respond to another area. He implied that during the interviewing process we would identify those students who would return to rural and other critical shortage areas. Having had the opportunity to interview applicants for the past seven years I have found that if all the applicants who vowed that their goal was to be a family practitioner in a rural community in our state carried out this intent we would have a glut of country doctors and Fayette and Jefferson counties would be crying about their critical shortages. There is no question that individual goals change as the student matures and progresses through the medical curriculum but it is also true that applicants have learned how to interview and either through conscious or subconscious motivation tell the interviewers what the public wishes to hear. Some interviewers are able to pick up the incongruity of some of these stated plans and can report this to the admissions committee but many others pass as entirely sincere.

The statement in these letters and commentary that I agreed with most wholeheartedly was that up to now no one has found a 100% effective solution to this problem.

E. C. Seeley, M.D.
Associate Professor
Department of Family Practice
University of Kentucky, College of Medicine

Postgraduate Opportunities

JUNE

2-4 Continuing Medical Education Course, University of Kentucky, 11th Update In OB-GYN, Hyatt Regency Hotel, Lexington

4-5 Soft Tissue Surgery Workshop, The New Haven Ear Nose Throat & Facial Plastic Surgery Center, 98 York Street, New Haven, CT.

4-6 Regional Postgraduate Meeting, Maxwell House, Nashville, TN. Southern Medical Association, in cooperation with Vanderbilt University School of Medicine; endorsed by the Tennessee Medical Association. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

9-11 7th Annual Conference on the Clinical Application of Hyperbaric Oxygen, Disneyland Hotel, Anaheim, CA

10-11 Physicians Role in Confronting Medical Care Issues. Orlando Hyatt, Orlando, FL. Southern Medical Association. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

13-18 Seventh Annual Family Medicine Review, Galt House, Louisville

17-18 Physicians Role in Confronting Medical Care Issues. Williamsburg Inn, Williamsburg, VA. Southern Medical Association. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

JULY

7-8 Wayne State University Symposium on Cerebral Resuscitation, Westin Hotel, Detroit. For information: (313) 577-1180

27-31 Fifth Annual Symposium on Contemporary Clinical Neurology, Palmetto Dunes Hyatt Resort, Hilton Head Island, SC

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

SEPTEMBER

10-11 Diseases of the Ear, Bethesda Hospital and Deaconess Association, Stouffer's Cincinnati Towers, 141 W. Sixth Street, Cincinnati, OH

24-26 Regional Postgraduate Meeting. Marriott Hotel, New Orleans, LA. Southern Medical Association. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

30-2 76th Annual Scientific Assembly, a conjoint meeting of the Southern Medical Association and the Medical Association of Georgia, Peachtree Plaza Hotel and Georgia World Congress Center, Atlanta. Contact: Southern Medical Association, PO Box 2446, Birmingham, AL 35201

NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

Doctor Holloway Nominated for President-Elect

James B. Holloway, Jr., M.D., a practicing general and thoracic surgeon from Lexington, has been nominated for KMA President-Elect by the Fayette County Medical Society.

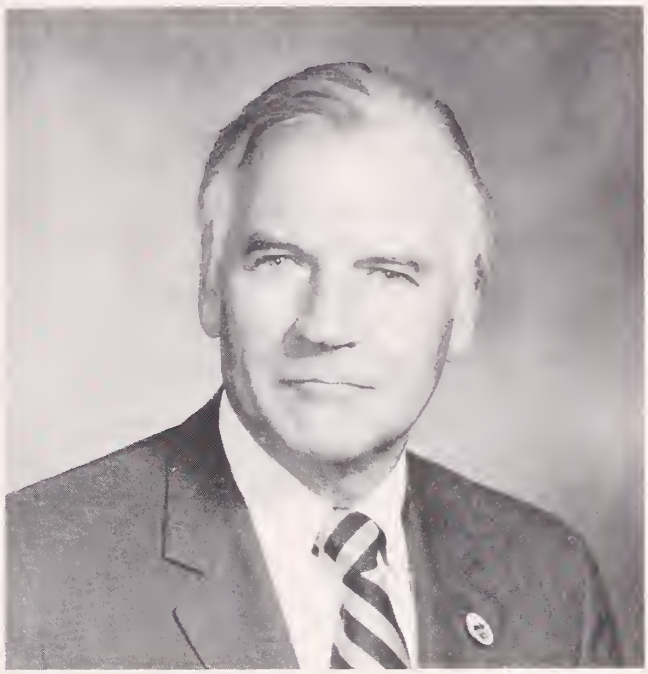
Doctor Holloway graduated from Yale University in 1943, and attended the Yale University School of Medicine, graduating in 1945. He interned in general surgery at Duke University from 1945-46, and received residency training at the VA Hospital in Chamblee, Georgia, from 1948-1952. He served in the U.S. Navy from 1946-1948 and 1950-51.

Holloway is a Fellow of the American College of Surgeons and has served as Chairman of the Committee on Applicants for District III of Kentucky. He is also a Diplomate member of the American Board of Surgery.

Organizational memberships include the Fayette County Medical Society, in which he served as President; KMA, where he has served as the chairman of three different committees, has been a member of the Board of Trustees, served as Chairman of the Board of Trustees and was elected Vice President of the Association for 1972-73; and the American Medical Association. He is also a member of the Lexington Surgical Society, having served as its President; the Kentucky Surgical Society; the Southern Society of Clinical Surgeons, having served as President; and the Southern Surgical Association.

Doctor Holloway has been Chief of Surgery at the St. Joseph Hospital in Lexington, and has been a member of the Hospital Board of Directors. He is on the medical staff of the UK Medical School and is an Associate Clinical Professor of Surgery, as well as having served on the medical school Admissions Committee.

Doctor Holloway is also a member of the Kentucky Medical Insurance Company Board of Directors.



In civic matters, Doctor Holloway has served on the District 15 Health Planning Council, the Kentucky Cancer Commission and the Statewide Health Coordinating Council.

His interests include horse training and steeplechase training and competition, and in this area, he has been a Board member of the U.S. Pony Club, a senior member of the National Steeplechase and Hunt Association, Board member of the United States Combined Training Association, Secretary of the National Steeplechase and Hunt Association, and was the state Chairman for the United States Equestrian Team.

Doctor Holloway and his wife Kay have two daughters.

IN MEMORIAM

JOHN T. TCHENG, M.D.
1919-1982
Covington

John T. Tcheng, M.D. died March 10. Doctor Tcheng was a 1942 graduate of Aurora University French School of Medicine. He was an anesthesiologist and had been a member of KMA since 1954.

IRVIN H. SONNE, M.D.
1888-1982
Louisville

Irvin H. Sonne, M.D. died March 17. Doctor Sonne was a 1911 graduate of the University of Louisville Medical Department. He was a psychiatrist and had been a member of the KMA since 1952.

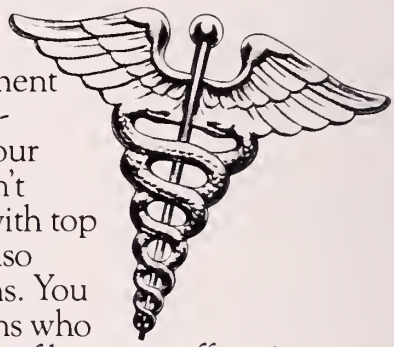
ROBERT F. JASPER
1885-1982
Somerset

Robert F. Jasper, M.D. died March 29. Doctor Jasper was a 1908 graduate of the Kentucky School of Medicine. He was a general surgeon and had been a member of KMA since 1952.

A. L. ROBY
1921-1982
Jeffersonville, Indiana

A.L. Roby, M.D., died April 3, at Clark County Memorial Hospital. Doctor Roby was a pediatrician and had served as President of the Medical Staff of the old Children's Hospital. He had been a member of KMA since 1962 as well as a member of the Indiana Medical Association and the American Medical Association.

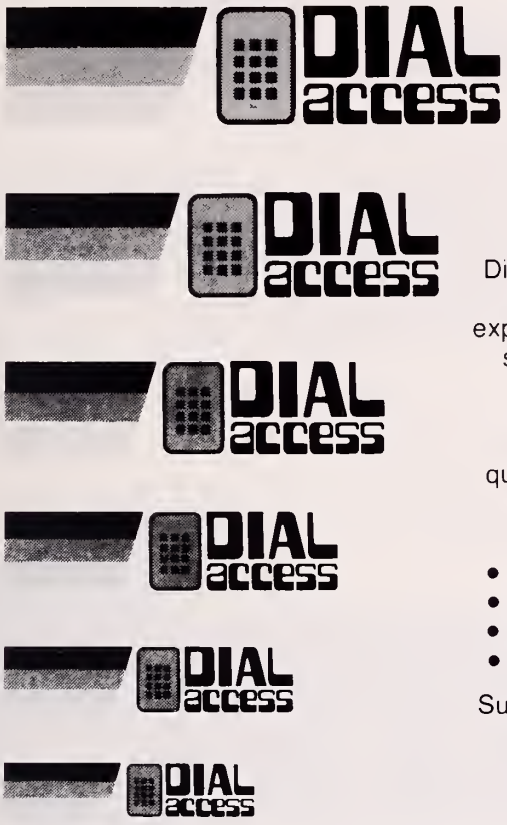
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In addition, in view of The Copyright Revision Act of 1976, effective January 1, 1978, transmittal letters to the editor should contain the following language: "In consideration of The Journal Of The Kentucky Medical Association's taking action in reviewing and editing my submission, the author(s) undersigned hereby transfers, assigns, or otherwise conveys all copyright ownership to The Journal in the event that such work is published by The Journal.

Titles should include the words most suitable for indexing the article, should stress the main point, and should be short.

A synopsis-abstract must accompany each manuscript. The synopsis should be a factual (not descriptive) summary of the work and should contain: 1) a brief statement of the paper's purpose, 2) the approach used, 3) the material studied, and 4) the results obtained. The synopsis should be able to stand alone and not merely duplicate the conclusions.

References should be cited consecutively in the text and should contain, in order, the author, title of article, source, volume, inclusive page numbers, year. Journal abbreviations should conform to the Index Medicus. The Journal of KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material is reviewed by the Board of Editors and publication of any article is not to be deemed an endorsement of the views expressed therein. The editors may use up to six different illustrations with the essayist bearing the cost of all over three one-column halftones.

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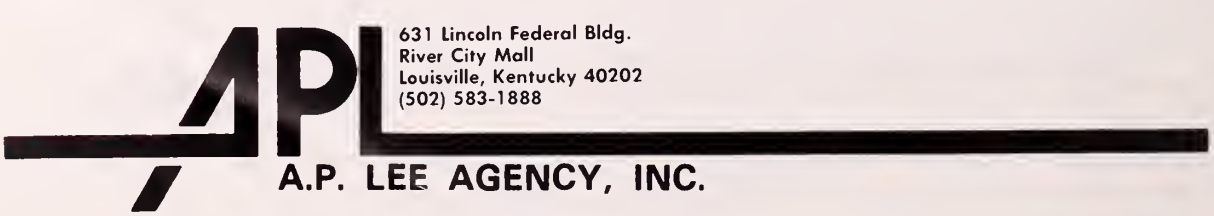
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Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.

For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. Limited clinical information presently available on effectiveness of treatment of otitis media with Bactrim when infection is due to ampicillin-resistant *Haemophilus influenzae*. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media et any age.

For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.

For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.

Also for the treatment of documented *Pneumocystis carinii* pneumonitis. To date, this drug has been tested only in patients 9 months to 16 years of age who were immunosuppressed by cancer therapy.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides, patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.

Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.

Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.

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Dosage: Not recommended for infants less than two months of age.

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Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.

Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.

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1. Rubin RH, Swartz MN: *N Engl J Med 303* 426-432, Aug 21, 1980. **2.** Data on file, Medical Department, Hoffmann-La Roche Inc.

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Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25,† and in boxes containing 10 strips of 10†

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PRESIDENT'S PAGE



When elected Chairman of the Board of the Kentucky Medical Association, in September 1981, and having served on the Board for three years I thought I had a pretty good understanding of the Board and how it works. However, in the last nine months I have learned so much more about the Board that I really wonder how much the average member knows about the Board of Trustees and its function. For that reason, I thought a brief summary of the Board's anatomy and physiology might be in order.

The Board is made up of 15 Trustees, one from each of the Trustee Districts. A Trustee is nominated by the Delegates from his or her District and elected by the House of Delegates for a three-year term and may serve only two consective terms. One third of the Board is elected each year. An alternate Delegate is elected at the same time to serve if necessary.

In addition to the 15 Trustees, the Board includes the Officers of the KMA (including Immediate Past President, the Speaker and Vice Speaker of the House), and the Delegates to the American Medical Association. The Board has 28 members at the present time.

The Board meets three times a year in regular session and almost daily during the Annual Meeting. Its meetings are on call by the Chairman or on petition of three trustees during the year.

The Executive Committee of the Board serves as the executive organ of the Board between meetings. The Quick Action Committee is made up of the President, President Elect, Chairman of the Board and Secretary Treasurer and serves to respond to problems which demand immediate decisions.

A complete list of the functions of the Board would be too lengthy to list here but they include: 1) act as executive organ of the House of Delegates. 2) communicate the views of the profession and the KMA to the public and the media. 3) elect the editor of the KMA Journal and supervise the publication of the Journal. 4) make an annual report to the House of Delegates. 5) control and direct the Annual Meeting including the program and exhibits. 6) appoint, change or abolish committees as necessary. 7) represent the KMA position to the national and state legislatures through direct action and through committee activities. 8) supervise and direct our peer review activities.

This is only a partial list and underlines one of our great problems in organized medicine. Everyone of the 28 Board members plus many of the very active committee members are practicing physicians and are also trying to be husbands, wives, citizens, community members as well as squeezing out a little time for themselves. We are part-time players in a tough game in which many of the players are full-time. The only way we can stay in the game is by having an excellent committed full-time staff and fortunately we have that.

I believe the Board of Trustees duties as outlined above gives us an effective vehicle in which to function and to deal with our problems including those I consider our two biggest problems at present. Number one, the cost of medical care—this difficult and much belabored problem can only be solved if there is a sincere commitment by the physicians. Without this all the other efforts at cost control are worthless.

In addition to being a severe and fundamental problem medical care cost is the cross on which our enemies plan to crucify us. The second problem is the ability or lack of ability of our profession to function effectively politically. For better or worse, government is in medicine and is in to stay. We must hammer out our differences among ourselves and then present a united front in the political arena if our profession is to serve as we know it. I believe we can achieve this with our present KMA structure.

Richard F. Hench, M.D.
Chairman, KMA Board of Trustees

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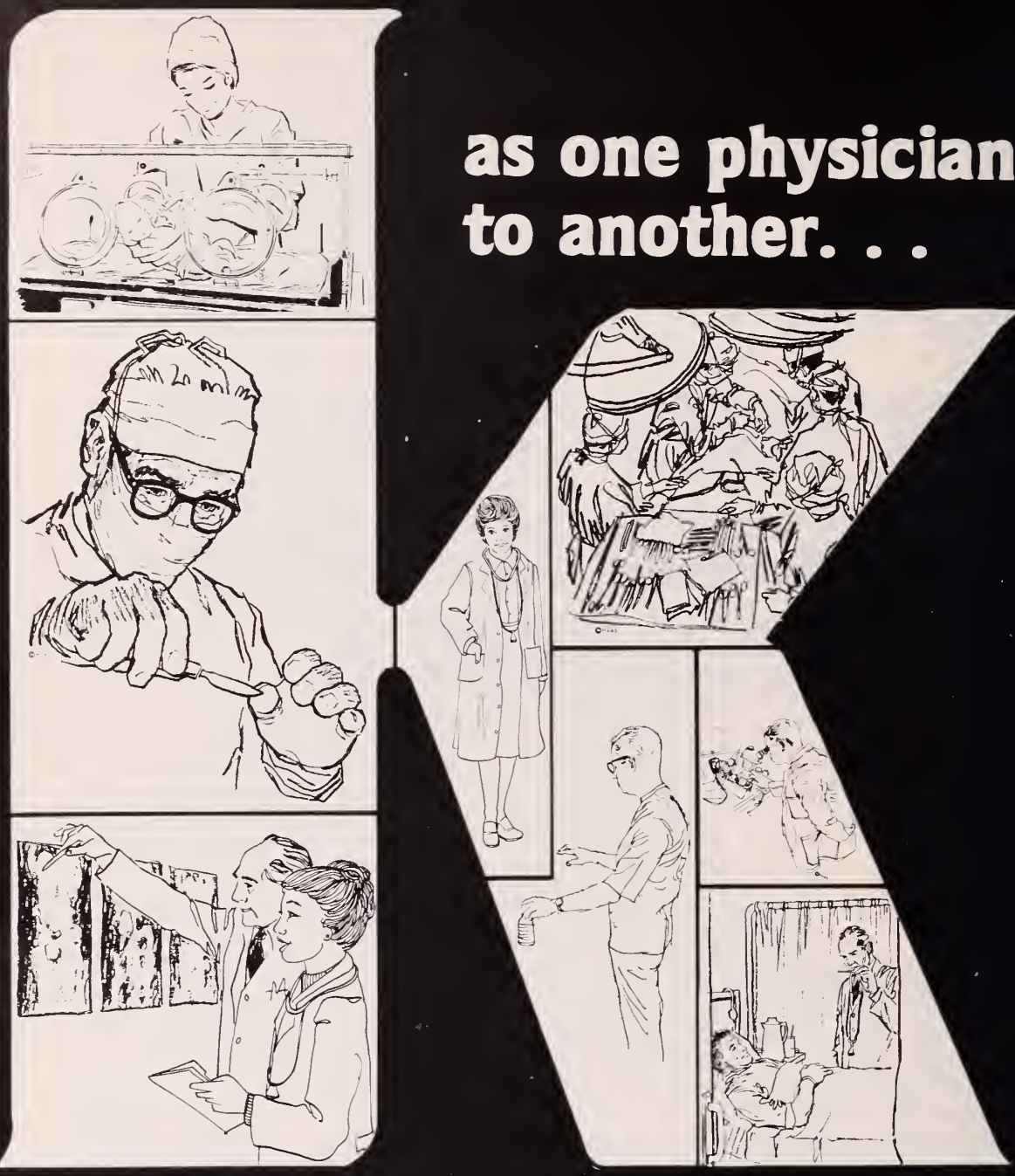
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The Journal Of The Kentucky Medical Association

July 1982 Volume 80 Number 7

Aneurysmal Bone Cyst of Rib

PORTER MAYO, M.D. and SIBU P. SAHA, M.D.

An aneurysmal bone cyst is considered to be a benign process usually observed in children and young adults. The majority of the lesions are localized in the long bones and in the vertebrae; the ribs are rarely involved. Because of the high incidence of malignancy in primary rib tumors they should be differentiated from malignant tumors and adequately treated if recurrences are to be avoided.

ANEURYSMAL bone cysts may occur in any bone and usually are seen in the younger age group.[1] Ruiter states that almost 85% (89 out of 105) of the patients in his study, were 20 years or younger.[2] The descriptive term refers to the roentgenographic appearance of an expanded area of bone with preservation of a thin shell of cortical bone over the lesion. The cysts are most often located in the long bones and in the vertebrae.[3] The occurrence of an aneurysmal bone cyst in a rib is, however, rare. Lichtenstein[4] (1957), reported but two such rib lesions in a series of 50 patients, and Dabska[1] (1969), in a review of 193 aneurysmal bone cysts, cited only one patient having rib involvement. Hurvitz *et al.*, (1977), stated that to their knowledge only seven cases of aneurysmal bone cysts of the rib had been reported in the world literature.[5] Ishinada (1979), reported four cases of rib involvement in a series of 107 aneurysmal bone cysts.[6] There is no male or female predominance.[7] Because of the high incidence of malignancy in primary rib tumors (68.3% as reported by the Mayo Clinic in 1957)[8] definitive diagnosis and adequate treatment are essential. We present a 27-year-old man treated by surgical excision of the affected rib lesion, without recurrence (eight years).

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Case Report: This 27-year-old patient was evaluated due to an abnormal chest x-ray showing an expanded thin wall lesion involving the right ninth rib posteriorly. (Fig. 1) The patient was asymptomatic and had been in good health throughout his life. There was no tenderness or swelling of the soft tissues of the thoracic cage nor any other physical abnormality.

Because of the possibility of a malignant lesion, resection was recommended. The cyst measured 3 cm. in length and extended into the intercostal tissues of the ninth interspace. We elected to enter the thoracic cavity to more adequately evaluate the lesion. Surgical excision of segments of the ninth and tenth ribs, with the involved intercostal tissues was performed with approximately 3 cm. margins of normal bone on each side of the lesion.



Fig. 1: Destruction of the right ninth rib by an expanding thin shell aneurysmal bone cyst.

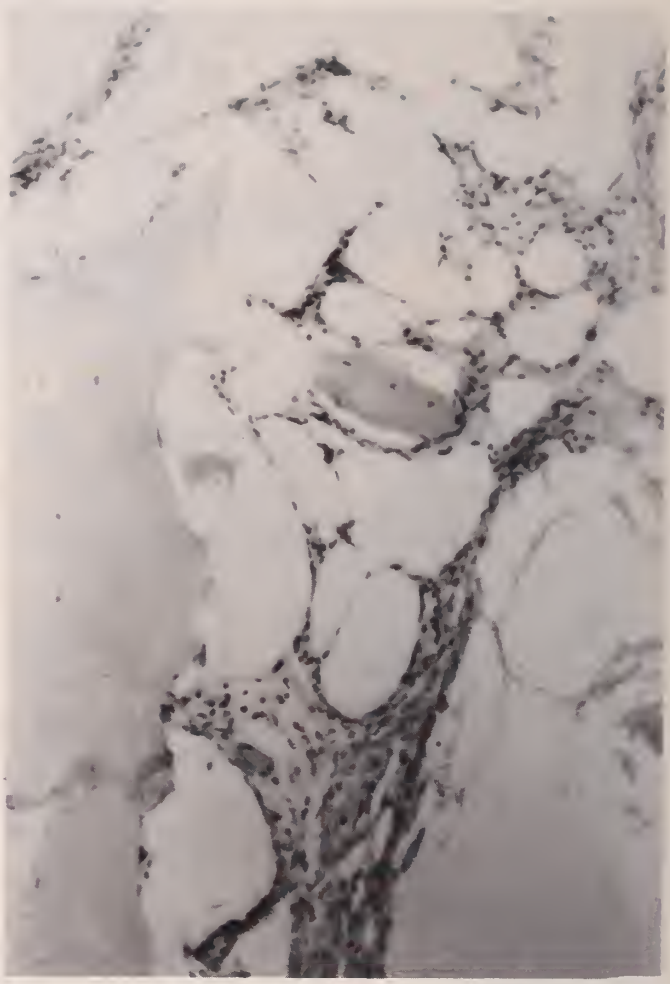


Fig. 2: The medullary portion of the bone contains large thin-walled vascular spaces, maintaining an endotheial lining. There is fragmentation of intervening spicules and the thin trabecular spaces contain active hematopoietic tissue. (x 100)

Microscopic: "Sections of rib (ninth) show at the site of the grossly expansile lesion, the medullary portion of the bone to contain large thin-walled vascular spaces, maintaining an endothelial lining. There is fragmentation of intervening spicules, the intertrabecular tissue in addition containing spindle shaped connective tissue cells. There is focal hemosiderin pigment deposition and the formation of a rare multinucleated giant cell and in areas, cholesterol cleft formation. Along one margin there is irregularity of the cortical surface, and in areas the trabecular spaces contain active hematopoietic tissue." (Fig. 2) Impression: Benign aneurysmal bone cyst, ninth rib.

Discussion: The exact cause of this peculiar vascular bone lesion is not clear. According to Lichtenstein[9] the aneurysmal cyst may develop as a local disturbance in hemodynamics, namely a suddenly increasing pressure in the vascular bed of the affected bone. Under the influence of an elevated venous pressure and engorged vascular bed the balloon-like formation occurs, giving the lesion its characteristic roentgenographic and clinical picture. Other theories include Biesecker[10] *et al.*, who suggest that another primary bone lesion in or adjacent to the cyst causes an arteriovenous fistula and consequently the aneurysmal bone cyst. Slowick[11] *et al.*, believe that the formation of an aneurysmal bone cyst is probably a disparity between the arterial inflow and venous outflow, effectively creating a partial venous obstruction. He discards any role of trauma in the etiology and pathogenesis of aneurysmal bone cyst.

The treatment of aneurysmal bone cyst is, for the most part surgical; although radiologic and cryosurgical treatments give good results.[1,3,7,11,12] Bossart[13] states that the x-ray picture of the rib lesion is not as typical as that of the classic long

bone cyst with thin radiopaque lines representing bone within the fibrous septae accounting for the soap bubble appearance and the ballooning effect. The malignant potential and the fact that the rib location permits definitive resection invite surgical excision. Recurrence of the cysts, 21% (Tillman et al.) and 30.5% (Ruiter), have been reported but not in those cases of rib involvement.[1,2,3,13,14] Metastases have not been described.[7]

Acknowledgment

We wish to acknowledge the contribution of Camille M. Jernigan, Medical Research Journalist, Mayo, Long & Saha, P.S.C.

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Electron Beam Irradiation for Mycosis Fungoides Using Variable Energy

CHARLES W. COFFEY II, PH.D., YOSH MARUYAMA, M.D., BARRY L. STEWART, M.S. & GERALD A. WHITE, M.S.

A method was developed for total skin electron beam irradiation (TS-EB) for mycosis fungoides. An evaluation system with use of skin and tumor thickness measurement suggested that conventional low energy electron beams did not treat thick or deep lesions. A variable energy electron beam treatment method was developed with use of 9 MeV and 6 MeV nominal beam energies. This treated lesions as thick as 2.2 cm. Lesions were treated until flat with higher energy EB and then with the lower energy EB. Clinical tolerance and tumor regression were satisfactory and comparable to the use of the lower energy beam on thin mycosis fungoides lesions.

MYCOSIS fungoides is currently considered a form of malignant lymphoma which has its primary origins in the skin and is comprised of T-derived malignant lymphocytes.[1] Treatment of mycosis fungoides has been extremely diverse, and, rather than being curative in nature, has been palliative with the relief of distressing skin symptoms the primary accomplishment. During the past two decades, several major forms of therapy[2] have been shown to produce consistent regression of mycosis fungoides lesions: (a) topical chemotherapy; (b) total skin superficial radiotherapy; (c) systemic chemotherapy; and (d) psoralen ultraviolet (PUVA) therapy.[3]

Ionizing radiation has been used in the treatment of mycosis fungoides since 1902, when Scholtz[4] first reported on the treatment of mycosis fungoides lesions with the recently discovered "Roentgen rays." A major breakthrough in the treatment of mycosis fungoides with ionizing radiation came with the development of the ability to treat the total skin by means of electrons which penetrated to depths of about one cm. Thus, the more deeply situated tissues may be spared while treating the epidermis and dermis. In 1953, Trump *et al*[5] first reported the use of high energy electrons for the treatment of extensive superficial malignant lesions. Since that time electron beam therapy has proven to be a very effective means of managing patients with widespread mycosis fungoides. The treatment technique presented here for total skin electron beam (TS-EB) irradiation of mycosis fungoides was developed for more individualized patient therapy.

Our experience was with a group of patients with thick skin lesions and advanced or recurrent stages which required the development of a variable energy electron beam therapy technique.[6] This method may be useful to investigate for individualized patient therapy.

Technique

Whole skin irradiation using electron beams has proven beneficial in the treatment of mycosis fungoides.[5,7-10] Any electron beam used for superficial wide-field therapy should include the following characteristics:[11,12] (a) uniform dose at a suitable depth for therapy, (b) sharp drop off in dose beyond that depth, and (c) minimal x-ray or Brehmsstrahlung contamination. The limited penetration of the electrons is advantageous to the bone marrow, gastrointestinal tract, and other deep vital organs.

The large field TS-EB technique described here utilizes variable energy electron beams produced from a Varian Clinac-18 linear accelerator. Configuration of the accelerator, dual beam angles, and patient treatment distances are

From the Radiation Medicine Department, University of Kentucky Medical Center, Lexington, Kentucky 40536; St. Francis Hospital, Department of Radiation Therapy, Beech Grove, Indiana and Rocky Mountain Medical Physics, Inc., Colorado Springs, Colorado

Parameter	6 MeV*	9 MeV*	9 MeV**
Surface Energy E_O	4.9 MeV	7.6 MeV	6.3 MeV
Tissue Depth of 80% DD	1.2 cm	2.2 cm	1.5 cm
Tissue Depth of 30% DD	1.8 cm	3.1 cm	2.3 cm
Brehmsstrahlung X-Ray contamination 5 cm depth	1.0%	2.6%	2.7%
Dual Beam Field Uniformity	±5.8%	± 8.9%	—
Patient Dose Uniformity	±8.6%	±11.4%	—

*with beam degrader equal to 0.6 cm Lucite
**with beam degrader equal to 1.2 cm Lucite

Table 1. Mycosis Fungoides Variable Energy Beam Parameter Data

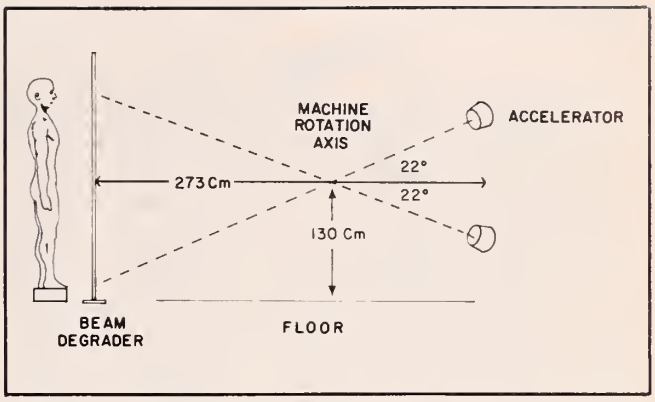


Fig. 1: The accelerator patient setup for whole body multiple field electron irradiation using the Varian Clinac-18 linear accelerator. The diagram indicates the relative positions of the accelerator, patient, and beam degrader. The dual beam technique was utilized.

shown in Figure 1. Seen also in this figure is a beam degrader made of 0.6 cm Lucite which is positioned to within 15 cm of the patient's skin surface. The degrader as used here acts both to decrease the penetration of the beam and to serve as an electron scattering device. Increasing the degrader thickness results in decreased beam penetration.

Field dose uniformity of the nominal 6 and 9 MeV beams, at the patient plane, was determined and results for the 6 MeV beam are seen in Figure 2. It yielded field dose uniformity results of ±5.8% and ±8.9% for the 6 and 9 MeV beams respectively.

The surface beam energy and penetration characteristics of the beams were investigated using ionization, thermoluminescence, and film techniques. The depth dose curves for the mycosis beams are shown in Figure 3. The 6 MeV electron beam was used for the treatment of disease limited to the epidermal and dermal skin layers. In addition, the 9 MeV depth dose curves can treat disease down to and including the subcutaneous tissues. In most instances the 6 MeV beam has been the standard method for patient treatment; however, for heavy patients who have thick lesions and advanced stages, the 9 MeV beams have been used for deeper subcutaneous penetration. In general, a 9 MeV beam was utilized until skin lesion flattening was achieved, and then the beam energy was decreased to 6 MeV. Beam parameters including surface electron energy, depth of 80% depth dose, and depth of 30% depth dose are shown in Table 1. Also listed in this table is the Brehmsstrahlung x-ray contamination where the values for the percentage Brehmsstrahlung radiation were determined from the depth dose curves (Figure 3), at a depth of 5.0 cm from the phantom surface.

A six-field technique was used and treatment parameters selected to provide the most uniform dose. The treatment fields in this six-field method include anterior (AP), posterior (PA), left anterior oblique (LAO), right anterior oblique (RAO), left posterior oblique (LPO), and right posterior oblique (RPO). For the dual beam arrangement and the six-field treatment technique illustrated in Figure 4, a total of 12 treatment fields are incorporated into a two-day treatment cycle.

All dose measurements were in reference to the abdominal plane of a Rando phantom. Rapid process films (Kodak RP/V) were loaded between transverse sections of the phantom and irradiated. The resulting films and isodensity results of this treatment technique are seen in Figure 5. Patient dose uniformity was confirmed using thermoluminescent methods (TLD). Data was integrated over the two-day treatment cycle

by appropriate repositioning of the TLD capsules (Table 1).

Results

Since the technique for TS-EB was developed[13] a total of 14 patients have been treated using total skin electron irradiation. Patient physics and clinical data are seen in Table 2. The average electron total body dose was 3200 rads with an average dose uniformity of ±9%. The average dose per cycle has been 210 rads with an average of 15 treatment cycles. The average time of therapy was 68 days using a prescribed fractionation scheme of 4F/week or approximately 420 rad/week of total body electron beam irradiation.

In our series, most patients presented with generalized disease with either plaques or exfoliative dermatitis. One patient has Stage I disease. One of the patients presented with Stage III disease with generalized nodules, tumors, and ulcers. Twelve of 14 patients presented with clinically evident lymphadenopathy, but as is often the case, no biopsy proven lymph node involvement was found.[14,15] The male to female ratio was 2.5 to 1 and the average patient age was 57 years. Five of 14 had generalized erythroderma with lymphadenopathy and abnormal lymphocytes in the peripheral blood and were considered to have Sezary's syndrome.

Thirteen of the 14 patients treated (93%) had a complete response with TS-EB therapy, and each of the 14 patients showed a gratifying evidence of remission of disease. However, as has been reported by others, remission can be short and active disease can recur despite early response. One incomplete remission was in a patient with advanced and repeatedly treated disease who was in a tumor-ulcer stage. He had deeply ulcerated lesions which did not completely heal although all plaque and superficial lesions healed. Three patients who presented with thick cutaneous lesions or thick skin in the regions of disease were treated with the 6/9 MeV beam method. Depth of lesion involvement and skin thickness were determined by CT scan. Remission was obtained in all and tolerance to therapy was good. Total dose for this group was 3482 rads in a period of 70 days. We started with the 9 MeV beam and, as lesions regressed, used the 6 MeV beam technique.

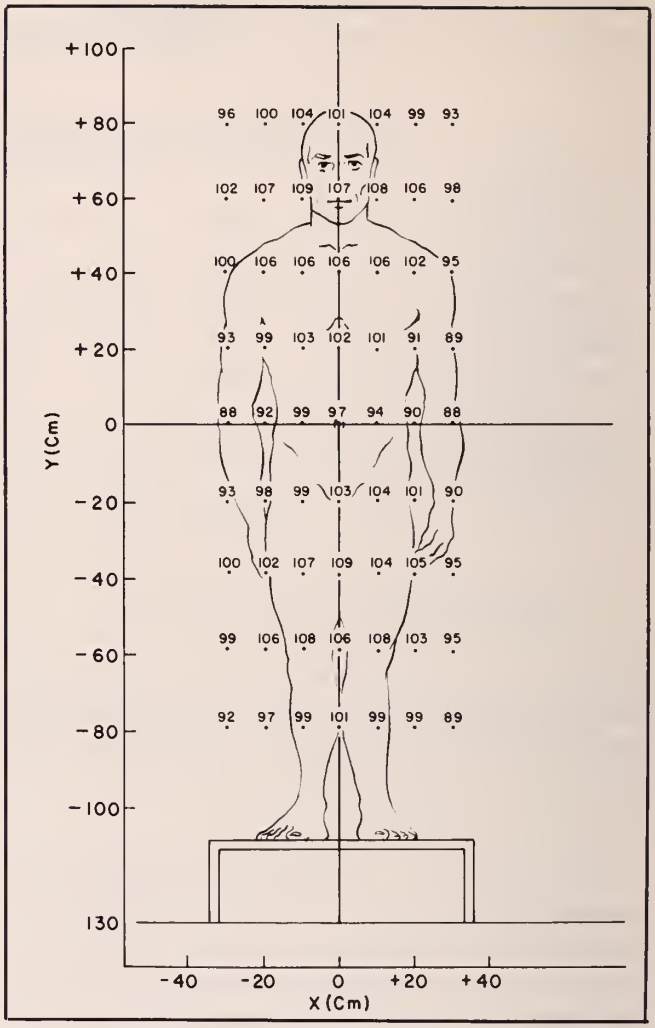


Fig. 2: Dose uniformity at the plane of the beam degrader utilizing the 0.6 cm Lucite degraded 6 MeV mycosis beam. The dual beam technique was followed. Uniformity of dose was determined via TLD-100 LiF powder.

Discussion and Conclusions

During the early 1970's, several institutions reported on the clinical aspects of large series of patients, allowing prognostic variables to be identified.[2,14,15] The most important prognostic signs were shown to be extent and type of cutaneous involvement and of lymph node and visceral involvement. Of lesser prognostic importance were the factors of age and sex. Thus, staging is possible and allows selection of total body electron beam therapy for appropriate stages of disease.[15–17] Individualization would appear to be an important method for therapeutic management as efficacy of TS-EB has been >90% in other experiences as well as that reported here.

TABLE 2

		Sex	Age	Stage	Type	Lympha-Denopathy	Electron Energy	Total Dose	Dose Per Cycle	No. Cycles	Total Time	Response
GD	1	M	61	IA	LP	−	6MeV	2453++	223±6%	11	37 days	Remission
LP	2	M	44	IIC	GEP	−	6,9MeV	3022	189±10.3%	16	88 days	Remission
SP	3	F	30	III	GP(E?)	+	6MeV	3192	228±4.3%	14	50 days	Remission
DI	4	F	70	III	MPT	+	6MeV	3136	224±2.8%	14	60 days	Remission
BM	5	F	44	III	MP	+	6MeV	3584	224±10%	16	64 days	Remission
AS	6	M	49	IVA	GPTU	+	6MeV	3880	216±6%	18	62 days	Remission
CM	7*	M	54	IVB	GTU	+	6MeV	2472	206±6.4%	12	48 days	Partial Remission
MJ	8	M	59	IVA	GTU	+	6,9MeV	4082	227±8.1%	18	66 days	Remission
FB	9	M	52	IVA	GTU	+	6,9MeV	3342	223±10%	15	57 days	Remission
LS	10+	M	79	Sezary's III(?)	GE ED(S)	+	6MeV	3604	212±13%	17	77 days	Remission
WG	11	M	67	Sezary's III(?)	GE ED(S)	+	6MeV	3216	201±10.3%	16	67 days	Remission
LH	12	M	66	Sezary's III(?)	GE ED(S)	+	6MeV	3150	210±14.5%	15	95 days	Remission
AK	13	M	76	Sezary's III(?)	GE ED(S)	+	6MeV	2772	154±14.8%	18	122 days	Remission
BS	14	F	41	Sezary's III(?)	GE ED(S)	+	6MeV	2970	198±8.2%	15	53 days	Remission

* Died of disseminated disease (21) Patient had had extensive prior radiotherapy and topical chemotherapy
\+ Died of nonrelated complication
++ Local spot boost to 3600 rad

L = Limited (10%); M = Moderate (10%); G = Generalized; P = Plaque; E = Erythematous; T = Tumors; U = Ulcers
ED = Exfoliative Dermatitis; S = Sezary's

(?) The Sezary may represent the most advanced or Stage IV case

Table 2. Mycosis Fungoides Patient Data—University of Kentucky Medical Center

A recent report indicated the importance of thickness of tumor lesion for electron beam therapy.[17] Proctor *et al*[19] have reported the presence in five patients of mycosis lesions in the deep subcutaneous tissue. They proposed that these lesions escaped the therapeutic effect of conventional electron beams because of their deep location. In our study, patients undergo routine total body CT scanning. The information obtained by CT scanning studies on skin thickness, depth of tumor extension, presence of enlarged lymph nodes, as well as regarding retroperitoneal lymph node status, has aided in our approach to individualized patient care. Listed in Table 2 are the three patients that required 9 MeV TS-EB. In these patients, subcutaneous tissue thickness and depth of tumor involvement was sufficiently increased beyond the 1.2 cm treatment depth of 6 MeV beam that a higher energy beam was warranted (Table 1).

As is common in all radiotherapy techniques, concomitant normal tissue risks are present. The x-ray contamination for the 6 MeV beam was 1.0% in the TS-EB method spread out over nine weeks (40 rads). This amount of total body x-ray irradiation has shown no untoward normal tissue effects. With the use of higher energy electron beams for total body irradiation, increased attention must be given to total body x-ray dose and lens protection.[18] The total body x-ray dose contamination was approximately 2.7% as measured at 5.0 cm tissue depth, and the eye dose was 4%. For those patients treated with the 6/9 MeV beam method, the total body x-ray dose averaged 66 rads. Again, no untoward normal tissue effects were observed.

For our series, results of TS-EB for mycosis fungoides has been successful in each case. TS-EB cleared the skin disease in 93% with total disappearance of symptoms and skin lesions. Time of remission has varied with individual patients depending upon disease stage and total skin involvement. The best results were obtained with low stage limited disease and limited skin

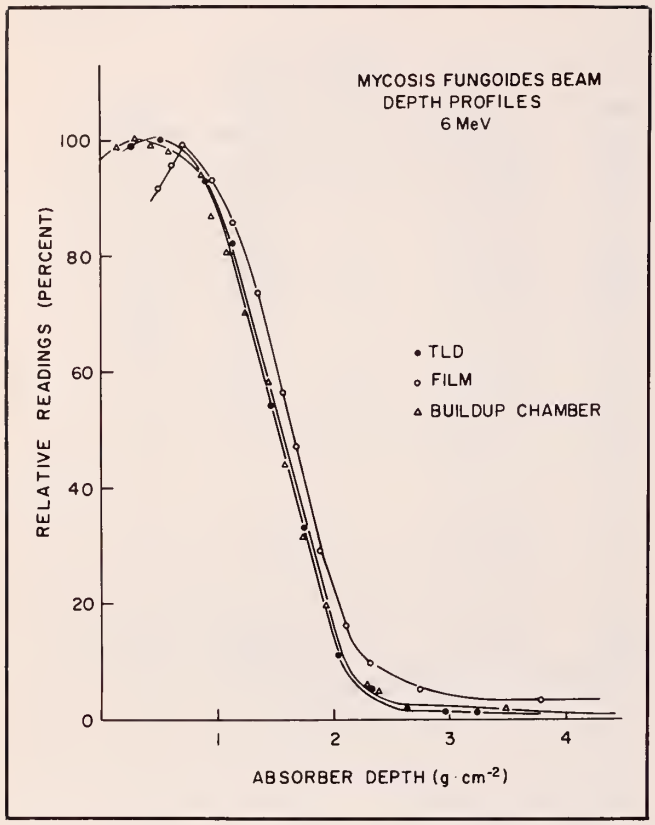


Fig. 3A: Relative depth dose profiles for the nominal 6 MeV mycosis fungoides beam degraded by 0.6 cm. Lucite.

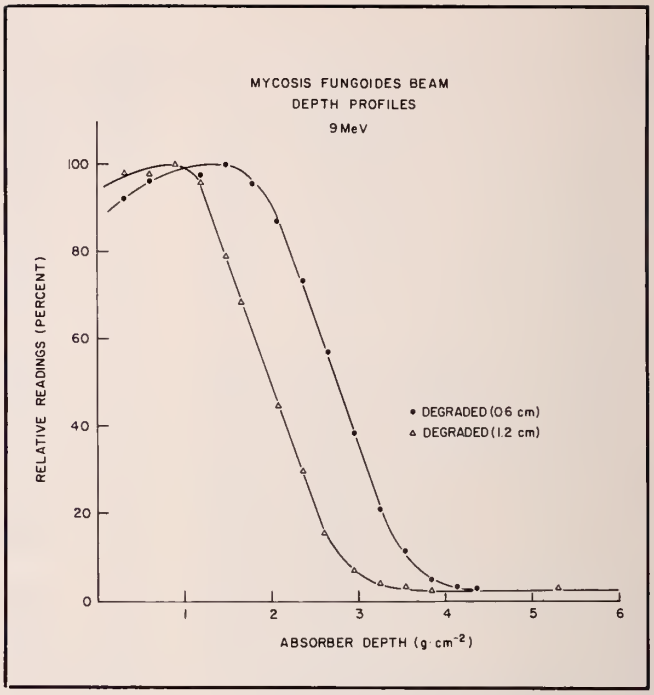


Fig. 3B: Relative depth dose profiles for the nominal 9 MeV mycosis fungoides beam degraded by 0.6 cm and 1.2 cm Lucite.

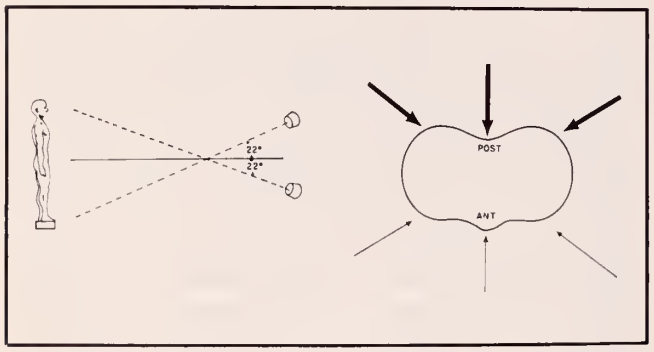


Fig. 4: Current treatment technique incorporating two treatment days, a single dual beam field, and a six field treatment cycle. Dark arrows indicate the first day of treatment and the light arrows indicate the second day.



Fig. 5A: Film techniques indicate uniformity and depth of penetration following whole body multiple field 6 MeV (lower) and 9 MeV (upper) electron irradiation utilizing a 0.6 cm Lucite degrader.

involvement; unfavorable results were observed for those patients presenting with Sezary's syndrome. This disease[15,16,17,20] is thought to be a clinical variant of mycosis fungoides. However, in patients with Sezary's syndrome, circulating malignant lymphocytes, lymphadenopathy, and diffuse infiltrative disease of the entire epidermis is present. Of five patients presenting with Sezary's, four recurred with disease at an average of six months after completion of TS-EB. However, one remains in complete remission at this time (30 months).

One of our patients with advanced tumor-ulcer and lymphadenopathy disease received combination chemotherapy and is disease-free at two years. He remains in remission whereas others treated with electron beam alone relapsed within a mean time of five months. Others also have reported[17] that the disease free interval

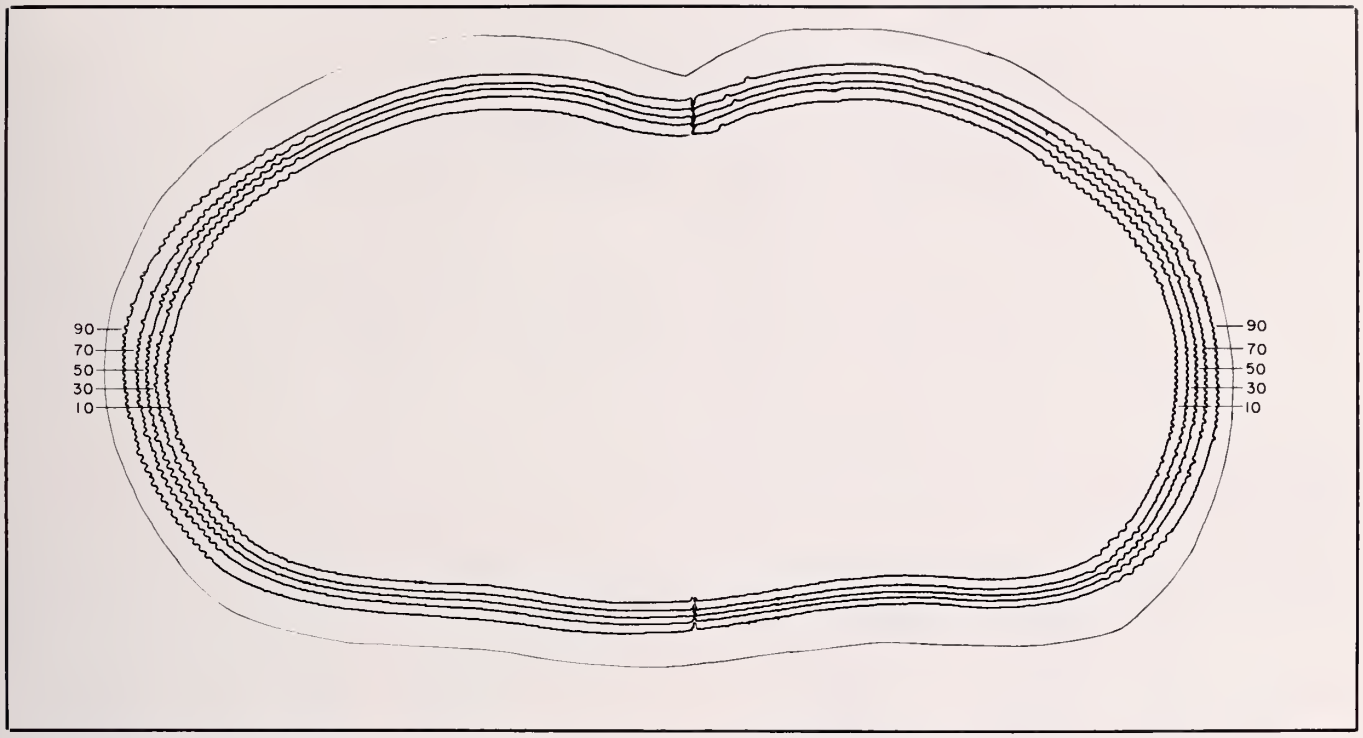


Fig. 5B: Resultant isodensity distribution representing dose uniformity following 6 MeV TE-EB.

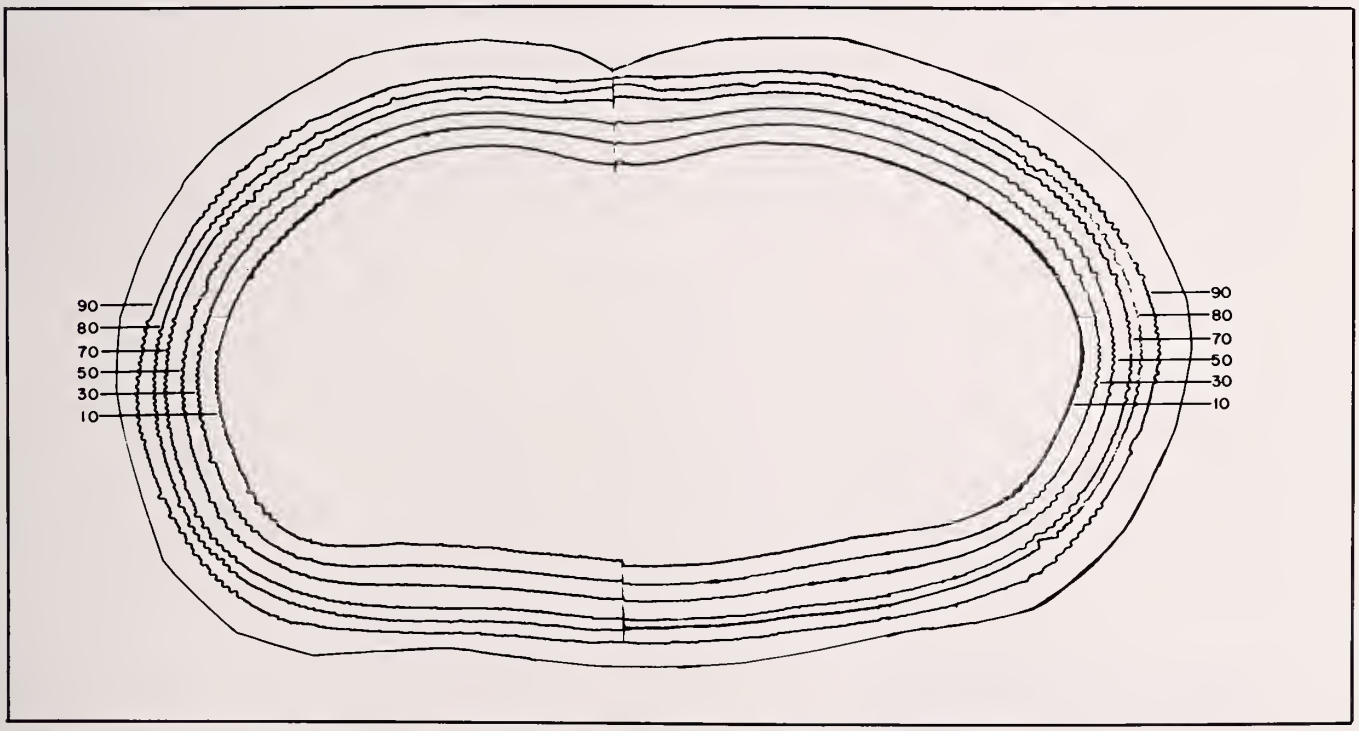


Fig. 5C: Resultant isodensity distribution representing dose uniformity following 9 McV TE-EB.

may be improved with the combination of electron beam irradiation and chemotherapy in comparison to patients receiving electron beam therapy alone.

We presently advocate a more aggressive approach toward the disease. With early recognition and diagnosis, a curative treatment course can be carried out when the disease is still limited and curable. Chemotherapy trials have shown that although response is frequently achieved, it is not curative and relapse early.[17] Thus, radiotherapy with TS-EB needs to be integrated into the total therapy plan; systemic therapy and perhaps topical therapy may be necessary for long term control.[16,17] Our approach has been to assess skin and tumor thickness with CT scanning and then to choose the appropriate energy electron beam for individualized therapy, and this approach is being tested at this Medical Center.

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†Pharmacokinetics cannot as yet be directly related to efficacy
*All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

See important information on following page.

Ativan® (lorazepam) for Anxiety

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

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Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

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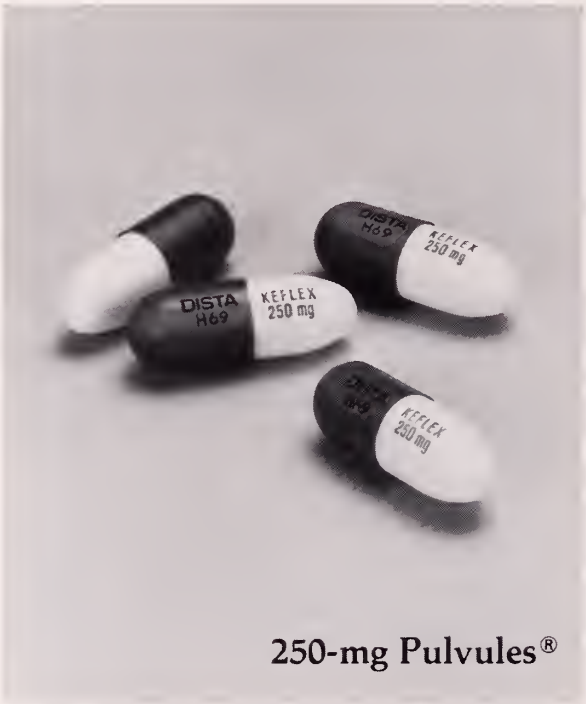
New in this month's Association Section of the *Journal* is a roster of all KMA members listed in alphabetical order by county and name. The *Journal* is the official publication of the KMA and is responsible for providing a forum for the exchange of scientific information and ideas. We also feel obliged to provide membership services. The roster is the result of considerable effort to furnish a direct member benefit. We intend it to serve as a handy reference for contact purposes and a central list of KMA members.

The Journal wants to continue to serve your needs by learning your views and know what you would like to see published each month. To accomplish this, a readership survey card was inserted randomly into the February and May 1982 copies of the *Journal,* and another will be sent again in the August issue. If you are one of the physicians to receive this survey card, we would like to stress the importance of your response to insure the accuracy of the results which will be published later in the year.

The Journal of KMA attempts to offer every member an opportunity to participate in the Association through its Letters to the Editor column, publication of scientific articles by Kentucky physicians on topics relevant to Kentucky physicians and through the Associational News section. We appreciate your interest.

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CONTRAINDICATIONS: Not for use in the eyes or in the external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

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PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

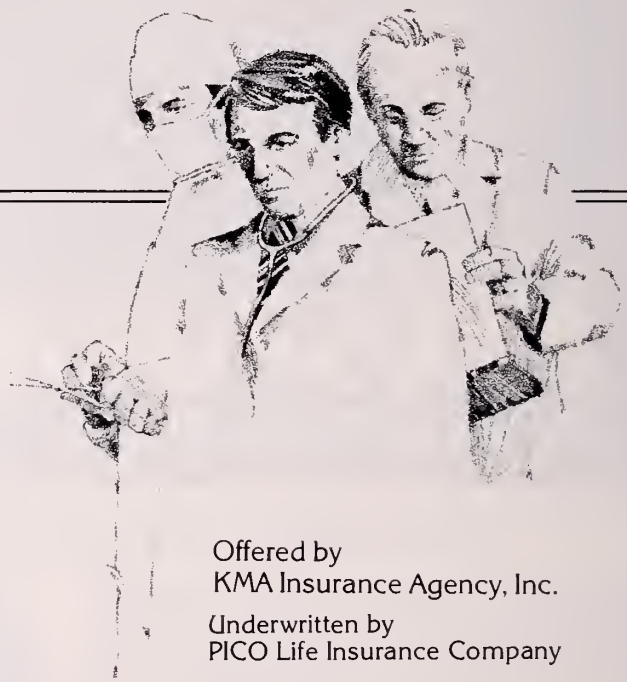
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Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.[1] In a double-blind crossover study of 42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.[2] This difference was highly significant ($p<0.001$). And a retrospective study of 2542 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.[3]

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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Kentucky Medical Association
1982-1983 Membership Directory
as of May 1, 1982

Listed in alphabetical order by county medical society and by name.

The directory includes member's name, address, specialty, medical school and year of graduation. Every effort was made to provide accurate listing. Member information has been reported to the Society by each individual physician listed. This information has not been verified with any other source. It is intended only for use in this directory and does not indicate specialty board certification or eligibility.

In the event of inaccuracies members are asked to fill out the form below and return it to KMA Membership Records Dept.

To: Kentucky Medical Association, Membership Records Dept.
3532 Ephraim McDowell Drive, Louisville, KY 40205

Please correct my listing in the 1982-83 Membership Directory as follows:

County Medical Society _____

Specialty _____

Name _____

Address _____

Phone _____ Medical School _____ Year _____

Speciality Code Key

IM Internal Medicine

SU Surgery

PD Pediatrics

OBG Obstetrics and/or Gynecology

OPH Ophthalmology

D Dermatology and/or Syphilology

P Psychiatry

U Urology

ORS Orthopedic Surgery

R Radiology

PATH Pathology

TS Thoracic Surgery

ANES Anesthesiology

PH Public Health

N Neurology

PRM Physical and/or Restorative Medicine

CRS Colon and Rectal Surgery

ENT Eye, Ear, Nose, and Throat

GP General Practice

OTO Otolarynogology

OM Occupational Medicine

NS Neurosurgery

C Cardiology

PUD Pulmonary Diseases

GE Gastroenterology

ADM Administrative Medicine

A Allergy

H Hematology

PS Plastic and/or Reconstructive Surgery

FP Family Practice

EM Emergency Medicine

U. S. Medical School Key

ALABAMA
0102 *Medical College of Alabama, Birmingham
0104 Birmingham Medical College
0106 *University of South Alabama, Mobile

ARIZONA
0201 *University of Arizona College of Medicine, Tucson

ARKANSAS
0301 *University of Arkansas School of Medicine, Little Rock
0302 College of Physicians and Surgeons, Little Rock

CALIFORNIA
0401 Cooper Medical College, San Francisco
0402 *University of California School of Medicine, San Francisco
0404 California Eclectic Medical College, Los Angeles
0405 Hahnemann Medical College of the Pacific, San Francisco
0406 *University of Southern California School of Medicine, Los Angeles
0407 College of Physicians and Surgeons of San Francisco
0408 Oakland College of Medicine and Surgery
0409 College of Physicians and Surgeons, Los Angeles
0411 *Stanford University School of Medicine, Pal Alto
0412 *Loma Linda University School of Medicine, Loma Linda, LA
0413 Pacific Medical College, Los Angeles
0414 *University of California, Los Angeles, School of Medicine
0415 *University of California, Irvine, California College of Medicine, Irvine
0418 University of California, San Diego School of Medicine, La Jolla
0419 *University of California, School of Medicine, Davis
0475 College of Osteopathic Physicians and Surgeons of LA

COLORADO
0501 Denver College of Medicine
0502 *University of Colorado School of Medicine, Denver
0503 Gross Medical College, Denver
0504 Denver College of Physicians and Surgeons
0505 Denver and Gross College of Medicine

CONNECTICUT
0601 *Yale University School of Medicine, New Haven
0602 *University of Connecticut School of Medicine, Farmington

DISTRICT OF COLUMBIA
0801 *George Washington University School of Medicine
0802 *Georgetown University School of Medicine
0803 *Howard University School of Medicine.

FLORIDA
0902 *University of Miami School of Medicine
0903 *University of Florida College of Medicine, Gainesville
0904 *University of Southern Florida, School of Medicine, Tampa
0905 Basic Medical Sciences Program, Florida State University, Talahassee

GEORGIA
1001 *Medical College of Georgia, Augusta
1005 *Emory University School of Medicine, Atlanta
1009 Georgia College of Eclectic Medicine and Surgery, Atlanta
1010 Southern Medical College, Atlanta
1011 Atlanta College of Physicians and Surgeons
1012 Atlanta School of Medicine
1018 Hospital Medical College Eclectic, Atlanta
1019 Southern College of Medicine and Surgery, Atlanta

HAWAII
5201 *University of Hawaii School of Medicine, Honolulu

ILLINOIS
1201 *Rush Medical College, Chicago
1202 *University of Chicago, Pritzker School of Medicine
1204 Hahnemann Medical College and Hospital, Chicago

Medical School Key

1205 College of Medicine and Surgery, Chicago
1206 *Northwestern University Medical School, Chicago
1208 Bennett Medical College, Chicago
1209 Northwestern University Womans Medical School, Chicago
1210 Chicago Homeopathic Medical College
1211 *University of Illinois College of Medicine, Chicago
1213 Harvey Medical College, Chicago
1214 National Medical University, Chicago
1215 Hering Medical College, Chicago
1216 Jenner Medical College, Chicago
1217 Illinois Medical College, Chicago
1218 Dunham Medical College, Chicago
1219 American Medical Missionary College, Battle Creek, Michigan and Chicago
1222 Chicago College of Medicine and Surgery
1239 Dearborn Medical College, Chicago
1242 *Chicago Medical School
1243 *Loyola University, Stritch School of Medicine, Maywood
1244 The General Medical College, Chicago
1245 *Southern Illinois University School of Medicine, Springfield
1276 Chicago College of Osteopathy

INDIANA
1305 Physiological Medical College of Indiana, Indianapolis
1308 Medical College of Indiana, Indianapolis
1309 Central College of Physicians and Surgeons, Indianapolis
1310 Fort Wayne College of Medicine
1317 Eclectic Medical College of Indiana, Indianapolis
1318 Indiana Medical College, School of Medicine of Purdue Univ., Indianapolis
1320 *Indiana University School of Medicine, Indianapolis
1327 University of Medicine, Indianapolis

IOWA
1401 College of Physicians and Surgeons, Keokuk
1403 *University of Iowa College of Medicine, Iowa City
1404 State University of Iowa College of Homeopathic Medicine, Iowa City
1406 Drake University College of Medicine, Des Moines
1408 Sioux City College of Medicine
1409 Keokuk Medical College
1410 Keokuk Medical College, College of Physicians and Surgeons
1475 College of Osteopathic Medicine and Surgery, Des Moines

KANSAS
1502 *University of Kansas School of Medicine, Lawrence, Kansas City
1503 Kansas Medical College, Topeka
1504 College of Physicians and Surgeons, Kansas City
1507 Western Eclectic College of Medicine and Surgery, Kansas City

KENTUCKY
1601 Kentucky School of Medicine, Louisville
1602 *University of Louisville School of Medicine
1604 Louisville Medical College
1605 Hospital College of Medicine, Louisville
1607 Louisville National Medical College
1608 Southwestern Homeopathic Medical College and Hospital, Louisville
1609 Kentucky University Medical Department, Louisville
1611 Louisville and Hospital Medical College
1612 *University of Kentucky College of Medicine, Lexington

LOUISIANA
1701 *Tulane University School of Medicine, New Orleans
1704 Flint Medical College of New Orleans University, New Orleans
1705 *Louisiana State University School of Medicine, New Orleans
1706 *Louisiana State University Medical Center, Shreveport

MAINE
1801 Bowdoin Medical School, Brunswick-Portland

MARYLAND
1901 *University of Maryland School of Medicine, Baltimore
1903 College of Physicians and Surgeons of Baltimore
1904 Baltimore Medical College
1905 Womans Medical College of Baltimore
1906 Baltimore University School of Medicine
1907 *Johns Hopkins University School of Medicine, Baltimore
1908 Atlantic Medical College, Baltimore
1909 Maryland Medical College, Baltimore
1911 Maryland College of Eclectic Medicine and Surgery, Baltimore

MASSACHUSETTS
2001 *Harvard Medical School, Boston
2005 *Boston University School of Medicine
2006 College of Physicians and Surgeons, Boston
2007 *Tufts University School of Medicine, Boston
2015 Middlesex University School of Medicine, Waltham
2016 *University of Massachusetts School of Medicine, Worcester
2075 Massachusetts College of Osteopathy Extinct, Boston

MICHIGAN
2101 *University of Michigan Medical School, Ann Arbor
2105 University of Michigan Homeopathic Medical School, Ann Arbor
2107 *Wayne State University School of Medicine, Detroit
2108 Michigan College of Medicine and Surgery, Detroit
2109 Saginaw Valley Medical College, Saginaw
2110 Grand Rapids Medical College
2111 Detroit Homeopathic College
2112 *Michigan State University College of Human Medicine, East Lansing

MINNESOTA
2204 *University of Minnesota Medical School, Minneapolis
2205 Minneapolis College of Physicians and Surgeons
2206 University of Minnesota College of Homeopathic Medicine & Surgery, Minneapolis
2207 University of Minnesota Duluth Medical Education Program, Duluth
2208 Mayo Medical School, Mayo Foundation, Rochester

MISSISSIPPI
2301 *University of Mississippi School of Medicine, Jackson
2302 Mississippi Medical College, Meridian

MISSOURI
2401 Missouri Medical College, St. Louis
2402 *Washington University School of Medicine, St. Louis
2403 *University of Missouri School of Medicine, Columbia
2405 Homeopathic Medical College of Missouri, St. Louis
2407 St. Louis College of Physicians and Surgeons
2408 Kansas City Medical College
2410 National University of Arts and Sciences Medical Department, St. Louis
2420 University Medical College of Kansas City
2422 Ensworth Medical College, St. Joseph
2424 Beaumont Hospital Medical College, St. Louis
2426 Kansas City Homeopathic Medical College
2427 Marion-Sims College of Medicine, St. Louis
2428 Barnes Medical College, St. Louis
2429 Central Medical College of St. Joseph
2430 Womans Medical College, Kansas City
2431 Hahnemann Medical College of Kansas City University, Kansas City
2432 Medical Chirurgical College of Kansas City
2433 Eclectic Medical University, Kansas City
2434 St. Louis University School of Medicine, St. Louis
2435 Southwest School of Medicine and Hospital, Kansas City
2443 Kansas City College of Medicine and Surgery
2444 Kansas City University of Physicians and Surgeons
2445 Mid West Medical College, Kansas City
2446 *University of Missouri, Kansas City School of Medicine, Kansas City
2478 Kansas City College of Osteopathy and Surgery, Kansas City
2479 Kirksville College of Osteopathy and Surgery, Kirksville

NEBRASKA
2604 Lincoln Medical College, Eclectic, Lincoln
2405 *University of Nebraska College of Medicine, Omaha
2406 *Creighton University School of Medicine, Omaha
2407 Nebraska College of Medicine, Lincoln

NEVADA
2701 University of Nevada School of Medical Sciences, Reno

NEW HAMPSHIRE
2801 *Dartmouth Medical School, Hanover

Medical School Key

NEW JERSEY
2905 *CMDNJ, New Jersey Medical School, Newark
2906 *CMDNJ, Rutgers Medical School, Piscataway

NEW MEXICO
3001 *University of New Mexico School of Medicine, Albuquerque

NEW YORK
3101 *Columbia University College of Physicians and Surgeons, New York
3103 *Albany Medical College of Union University, Albany
3105 New York University Medical College, New York
3106 *State University of New York at Buffalo
3108 *State University of New York at Brooklyn (Downstate)
3109 *New York Medical College, New York
3110 Bellevue Hospital Medical College, New York
3111 New York Medical College and Hospital for Women, New York
3113 Eclectic Medical College of the City of New York
3115 *State University of New York at Syracuse (Upstate)
3119 *New York University School of Medicine, New York
3120 *Cornell University School of Medicine, New York
3143 Fordham University School of Medicine, New York
3145 *University of Rochester School of Medicine & Dentistry
3146 *Albert Einstein College of Medicine of Yeshiva Univ., New York
3147 *Mount Sinai School of Medicine of the City University of New York
3148 *State University at Stony Brook Medical School

NORTH CAROLINA
3201 *University of North Carolina School of Medicine, Chapel Hill
3203 Leonard Medical School, Raleigh
3204 North Carolina Medical College, Charlotte
3205 *Bowman Gray School of Medicine of Wake Forest Univ., Winston-Salem
3207 *Duke University School of Medicine, Durham
3208 East Carolina University School of Medicine, Greenville

NORTH DAKOTA
3301 *University of North Dakota School of Medicine, Grand Forks

OHIO
3401 Medical College of Ohio, Cincinnati
3402 Eclectic Medical College, Cincinnati
3403 Starling Medical College, Columbus
3406 *Case Western Reserve University School of Medicine, Cleveland
3407 Cleveland University of Medicine and Surgery
3408 Cincinnati College of Medicine and Surgery
3409 Miami Medical College, Cincinnati
3411 University of Wooster, Medical Department, Cleveland
3413 Pulte Medical College, Cincinnati
3419 Toledo Medical College
3421 Laura Memorial Womans Medical College, Cincinnati
3423 Cleveland Medical College, Homeopathic, Cleveland
3425 Ohio Medical University, Columbus
3426 Cleveland Pulte Medical College
3440 *Ohio State University College of Medicine, Columbus
3441 *University of Cincinnati College of Medicine
3442 Ohio State University College of Homeopathic Medicine, Columbus
3443 *Medical College of Ohio at Toledo

OKLAHOMA
3501 *University of Oklahoma College of Medicine, Oklahoma City
3502 Epworth College of Medicine Oklahoma City

OREGON
3601 Williamette University Medical Department, Salem
3602 *University of Oregon Medical School, Portland

PENNSYLVANIA
3701 *University of Pennsylvania School of Medicine, Philadelphia
3702 *Jefferson Medical College of Thomas Jefferson University, Philadelphia
3707 *Medical College of Pennsylvania, Philadelphia
3709 *Hahnemann Medical College of Philadelphia
3711 Medico-Chirurgical College of Philadelphia
3712 *University of Pittsburgh School of Medicine
3713 *Temple University School of Medicine, Philadelphia
3714 *Pennsylvania State University, Milton S. Hershey Medical Center, Hershey
3717 Philadelphia College of Osteopathic Medicine, Philadelphia

PUERTO RICO
5301 *University of Puerto Rico School of Medicine, San Juan

RHODE ISLAND
3801 *Brown University Division of Biological and Medical Sciences, Providence

SOUTH CAROLINA
3901 *Medical University of South Carolina, Charleston

SOUTH DAKOTA
4001 State University of South Dakota School of Medicine, Vermillion

TENNESSEE
4101 University of Nashville, Medical Department
4105 *Vanderbilt University School of Medicine, Nashville
4106 *University of Tennessee College of Medicine, Memphis
4107 *Meharry Medical College, Nashville
4108 Memphis Hospital Medical College
4109 Chattanooga Medical College
4110 Lincoln Memorial University Medical Department, Knoxville
4111 University of the South Medical Department, Sewanee
4113 Knoxville Medical College
4114 University of West Tennessee College of Medicine and Surgery, Memphis
4115 College of Physicians and Surgeons, Memphis

TEXAS
4202 *University of Texas Medical Branch, Galveston
4203 Fort Worth School of Medicine
4204 *Baylor College of Medicine, Houston
4205 Physiological Medical College of Texas, Dallas
4206 Southern Methodist University Medical Department, Dallas
4207 Gate City Medical College, Dallas
4208 College of Physicians and Surgeons, Dallas
4210 Dallas Medical College
4212 *University of Texas, Southwestern Medical School, Dallas
4213 *University of Texas Medical School at San Antonio
4214 University of Texas Medical School at Houston
4215 *Texas Tech University School of Medicine, Lubbock

UTAH
4301 *University of Utah College of Medicine, Salt Lake City

VERMONT
4402 *University of Vermont College of Medicine, Burlington

VIRGINIA
4501 *University of Virginia School of Medicine, Charlottesville
4504 *Medical College of Virginia, Health Sciences Division, Va. Commonwealth Univ., Richmond
4506 University College of Medicine, Richmond
4507 *Eastern Virginia Medical School, Norfolk

WASHINGTON
4604 *University of Washington School of Medicine, Seattle
4615 Washington College of Physicians and Surgeons, Seattle

WEST VIRGINIA
4701 *West Virginia University, School of Medicine, Morgantown

WISCONSIN
4802 Wisconsin College of Physicians and Surgeons, Milwaukee
4803 Milwaukee Medical College
4805 *University of Wisconsin Medical School, Madison
4806 *Medical College of Wisconsin, Milwaukee (Formerly Marquette)

Foreign Medical Graduates
5088

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FP 1602 43
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311 So. Main St.
Lawrenceburg, KY 40342
FP 1602 58
Lewis E. Wash
103 N. Main St.
Lawrenceburg, KY 40342
GP 1602 58

BALLARD

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Bandana, KY 42022
GP 301 49
Jesse M. Hunt, Jr.
Box 286
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FP 1602 49

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PD 5088 66
Orlando F. Bravo
1411 N. Jackson Hwy.
Glasgow, KY 42141
OBG 5088 68
William H. Bryant
Howard Clinic
Glasgow, KY 42141
GP 1602 42
James P. Crews
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Cave City, KY 42127
GP 1701 68
John Dickinson
315 S. Green St.
Glasgow, KY 42141
SU 1602 33
Lewis Dickinson
315 So. Green St.
Glasgow, KY 42141
IM 1602 42
Lewis G. Dickinson
315 So. Green St.
Glasgow, KY 42141
IM 1602 71
Howard L. Edgin
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Glasgow, KY 42141
ANES 1602 70
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Glasgow, KY 42141
FP 76
Fernando P. Fornaris
219 Simmental Ln.
Glasgow, KY 42141
PUD 5088 41
Garland R. Garst
1212 So. Green St.
Glasgow, KY 42141
R 1602 60
Jerry L. Gibbs
Sampson Community Hospital
Glasgow, KY 42141
PATH 4105 66
Ray A. Gibson
Howard Clinic
Glasgow, KY 42141
OBG 1602 68
Daryl P. Harvey
Howard Clinic
Glasgow, KY 42141
FP 1701 43
Jake T. Hollen
109 Wingate
Glasgow, KY 42141
IM 1602 76
Eugene L. Marion
218 Columbia
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FP 1602 43
William Marrs
Glenview Dr.
Glasgow, KY 42141
FP 1602 74
John C. Marsh
P.O. Box 810
Glasgow, KY 42141
SU 1602 60
Carolyn H. McKinley
Howard Clinic
Glasgow, KY 42141
PD 4105 50
George G. McKinley
318 West Washington
Glasgow, KY 42141
PD 1602 46
Robert N. McKinley
Glenview Dr.
Glasgow, KY 42141
GP 1602 52
Bharat Mody
Central Ave.
Glasgow, KY 42141
SU 5088 67
Bharati Mody
Central Ave.
Glasgow, KY 42141
OBG 5088 68
Morris David Moss
1004 Glenview Dr.
Glasgow, KY 42141
PD 1602 75
Sandra D. Moss
1004 Glenview Dr.
Glasgow, KY 42141
PD 1602 75
Gilman P. Peterson, Jr.
Glenview Dr.
Glasgow, KY 42141
SU 1612 74
Narasimha Reddy
Rt. 7 Box 157/Country Club Est
Glasgow, KY 42141
ORS 5088 73
Judy F. Richey
Howard Clinic
Glasgow, KY 42141
GP 1602 74
Robert R. Starr
Howard Clinic
Glasgow, KY 42141
FP 1602 43
Tom Wells
Rt. 2 Box 243 A.
Glasgow, KY 42141
R 70
William C. Wells
1008 ½ Glenview Dr.
Glasgow, KY 42141
OPH 1602 33
George P. Whiteside
Glenview Dr.
Glasgow, KY 42141
GP 4106 41
Jim H. Whiteside
1004 Glenview Dr.
Glasgow, KY 42141
IM

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Robin A. Byron
114 Court St.
Owingsville, KY 40360
FP 4105 39

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Herald K. Bailey
1404 Montgomery Ave.
Ashland, KY 41101
GP 1602 34
Gary L. Barker
P.O. Box 1865
Ashland, KY 41101
SU 4105 71
Clyde A. Burgess
6 The Oaks Dr.
Ashland, KY 41101
FP 3441 61
Walter L. Cawood
1200 Bath Ave.
Ashland, KY 41101
R 1602 46
Edward W. Connelly
2321 Lexington Ave.
Ashland, KY 41101
OBG 3702 42
William T. Conner
1200 Bath Ave.
Ashland, KY 41101
U 4202 64
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Ashland, KY 41101
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FP 1602 74
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James R. Schrand
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FP 1602 60
John K. Schuler
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ORS 3441 75
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D 71
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FP 1602 71
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FP 4106 50
Charles E. Cook
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OPH 1602 44
William G. Hart
Medical Arts Bldg. Suite 201
Murray, KY 42071
OPH 1602 75
Hal E. Houston
300 So. 8th St.
Murray, KY 42071
SU 1602 62
Hugh L. Houston
300 So. 8th St.
Murray, KY 42071
IM 4105 33
Russell E. Howard
809 Olive St.
Murray, KY 42071
IM 1602 75
Donald G. Hughes
300 So. 8th St.
Murray, KY 42071
FP 1602 59
Herschel Jackson, Jr.
300 So. 8th St.
Murray, KY 42071
U 4106 64
Conrad H. Jones
305 So. 8th St.
Murray, KY 42071
OBG 1602 46
Prue W. Kelly
P.O. Box 145
Murray, KY 42071
R 1602 61
Phillip B. Klapper
300 So. 8th St.
Murray, KY 42071
OTO 4604 73
Conie C. Lowry
300 So. 8th St.
Murray, KY 42071
SU 4105 43
Robert G. Marquardt
300 So. 8th St.
Murray, KY 42071
GP 1612 68
Dan Miller
300 So. 8th St. Ste. 207
Murray, KY 42071
IM 1602 76
Billy W. P'Pool
901 Coldwater Rd.
Murray, KY 42071
GP 1612 74
John C. Quertermous
205 So. 8th St.
Murray, KY 42071
IM 1602 42
John R. Quertermous
205 South Eighth St.
Murray, KY 42071
IM 1602 76
Shashi K. Tandon
Murray-Calloway Hosp.
Murray, KY 42071
ANES 5088 72
Clarence G. Vire
300 So. 8th St.
Murray, KY 42071
FP 1612 75
Rob Williams
300 So. 8th St. Ste. 108
Murray, KY 42071
SU 68
William R. Wilson
Box 42, RR #7
Murray, KY 42071
R 1602 72

CARROLL

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Louisville, KY 40220
R 5088 58
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P.O. Box 309
Carrollton, KY 41008
FP 1612 74
Frank D. Law
P.O. Box 349
Carrollton, KY 41008
SU 601 49
Cecil D. Martin
P.O. Box 309
Carrollton, KY 41008
GP 1602 69
Kenneth H. McCrocklin
P.O. Box 209
Carrollton, KY 41008
SU 1602 50
David S. Miller
P.O. Box 309
Carrollton, KY 41008
GP 5088 73
Francis F. Palmer
P.O. Box 309
Carrollton, KY 41008
FP 1602 75
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South Pasadena, FL 33707
GP 1602 38

CHRISTIAN

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Western State Hosp.
Hopkinsville, KY 42240
GP 5088 59
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1610 So. Main
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ORS 4106 66
Emmanuel J. Battah
Jennie Stuart Hosp.
Hopkinsville, KY 42240
SU 5088 55
Neal Calhoun
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Hopkinsville, KY 42240
FP 1602 51
Carl B. Caplinger
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Hopkinsville, KY 42240
OTO 4501 58

CHRISTIAN—CLAY—CALDWELL—CLARK

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P.O. Box 244
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SU 1602 32
James K. Conlan
1725 Kenton
Hopkinsville, KY 42240
SU 1602 45
James E. Connerth
1113 Bethel St.
Hopkinsville, KY 42240
OBG 902 72
Ruth M. Coppedge
1600 So. Virginia St.
Hopkinsville, KY 42240
FP 1602 63
Guinn S. Cost
111 Derrick Way
Hopkinsville, KY 42240
FP 1612 72
John E. Cotthoff
1610 So. Main St.
Hopkinsville, KY 42240
IM 4106 48
James B. Cox
408 W. 17th St.
Hopkinsville, KY 42240
OBG 4106 60
Rachel G. Croft
1600 So. Virginia St.
Hopkinsville, KY 42240
FP 1602 45
Bennett L. Crowder, II
607 Hammond Plaza
Hopkinsville, KY 42240
SU 4106 61
James R. Dade
212 W. 18th St.
Hopkinsville, KY 42240
IM 4105 43
Edwin R. Davis
Hospital Ln.
Hopkinsville, KY 42240
R 1602 56
James W. Frazier
207 So. Clay P.O. Box 1105
Hopkinsville, KY 42240
GP 4107 53
Joseph T. Fuqua
1611 So. Main St.
Hopkinsville, KY 42240
IM 4105 64
John R. Garner
Rt. 2
Herndon, KY 42236
GP 1602 32
Jack Thomas Giannini
1611 So. Main St.
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SU 1602 70
Lyndon S. Goode
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U 1602 58
John W. Harned
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Daytona Beach, FL 32019
ENT 1005 24
Jerry T. Hart
1113 Bethel St.
Hopkinsville, KY 42240
OBG 4106 67
Ronald F. Howard
1610 So. Main St.
Hopkinsville, KY 42240
PD 1602 64
Hildebrando R. Hurtiz
Western State Hosp.
Hopkinsville, KY 42240
P 5088 47
William L. Long
Hospital Ln.
Hopkinsville, KY 42240
GP 4106 65
Ittoop T. Maliyekkel
Western State Hosp.
Hopkinsville, KY 42240
GP 5088 71
Thelma S. Manlavi
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P 5088 55
Ernesto M. Manongdo
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P 5088 71
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Hopkinsville, KY 42240
IM 5088 68
Gerald H. McCord
205 W. 15 St.
Hopkinsville, KY 42240
FP 1602 59
Jules J. McNerney
306 Deepwood Dr.
Hopkinsville, KY 42240
IM 1705 42
Alfreds Mitenieks
316 Donna Dr.
Hopkinsville, KY 42240
N
James P. Myers
1704 South Main St.
Hopkinsville, KY 42240
P 1602 54
James A. Parrott
Jennie Stuart Hosp.
Hopkinsville, KY 42240
R 1612 65
Kusum Kiri Patel
412 W. Riverwood Dr.
Hopkinsville, KY 42240
PATH 5088 68
Gabe A. Payne
1610 So. Main St.
Hopkinsville, KY 42240
PD 4105 43
W. Faxon Payne
Jennie Stuart Hosp.
Hopkinsville, KY 42240
R 4105 48
Frank R. Pitzer
Hospital Ln.
Hopkinsville, KY 42240
PATH 4106 61
Darrel E. Rains
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OPH 1612 65
Jere C. Robertson
408 W. 17th St.
Hopkinsville, KY 42240
OBG 4106 58
Charles D. Ross
Jennie Stuart Hosp.
Hopkinsville, KY 42240
R 4106 68
William M. Rowlett
209 W. 15th St.
Hopkinsville, KY 42240
OPH 1602 55
James F. Rozelle
404 Donna
Hopkinsville, KY 42240
P 4106 61
Norma T. Shepherd
212 W. 18th St.
Hopkinsville, KY 42240
FP 2605 45
James H. Simpson, Jr.
111 Derrick St.
Hopkinsville, KY 42240
FP 1602 70
Raymond C. Snowden
1712 High St.
Hopkinsville, KY 42240
FP 1602 44
Clarence E. Snyder
Jennie Stuart Hosp.
Hopkinsville, KY 42240
EM 1320 62
Gary G. Spencer
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FP 1602 76
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1611 S. Main St.
Hopkinsville, KY 42240
OPH 4105 72
George W. Thomas, Sr.
422 Cardinal Dr.
Hopkinsville, KY 42240
IM 1602 75
Sam H. Traughber
1910 So. Virginia St.
Hopkinsville, KY 42240
IM 1612 65
Calvin N. Turns
Western State Hosp.
Hopkinsville, KY 42240
P 3709 55
Joseph M. Vance
1612 So. Main St.
Hopkinsville, KY 42240
ORS 1602 67
Irene Y. Villarosa
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William C. Young
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PD 4105 60

CLAY

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Manchester, KY 40962
GP 1602 52
William E. Becknell
203 Main St.
Manchester, KY 40962
GP 1602 40
Wm. E. Becknell, Jr.
203½ Main St.
Manchester, KY 40962
SU 1612 74
Caleb H. Chu
Memorial Dr.
Manchester, KY 40962
SU 5088 42
Priscilla K. Chu
Oneida Dr.
Manchester, KY 40962
PD 3101 60
Darrell D. Life
Red Bird Hosp.
Beverly, KY 40913
FP 1502 64
Everett W. Schaeffer
Red Bird Mission
Beverly, KY 40913
GP 1211 43
Martha L. Seeley
Green Ridge Med. Bldg.
Manchester, KY 40962
GP 0412 75
Cecil E. Taylor
Third St.
Manchester, KY 40962
R 412 61
Ira F. Wheeler
Route 5
Manchester, KY 40962
FP 0412 52

CALDWELL

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Princeton, KY 42445
FP 1602 75
Ralph L. Cash, Sr.
P.O. Box 627
Princeton, KY 42445
FP 4105 40
Frank P. Giannini
110 So. Jefferson St.
Princeton, KY 42445
GP 301 42
Charles S. Settle
Box 647, Old Eddyville Rd.
Princeton, KY 42445
OBG 4105 67
Lathan E. Settle
P.O. Box 647
Princeton, KY 42445
FP 4105 71
Nathaniel H. Talley
110 E. Washington
Princeton, KY 42445
SU 4105 51

CLARK

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Winchester, KY 40391
FP 1602 61
Marvin E. Bishop
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D 1612 72
Robert F. Brashear
246 W. Lexington Ave.
Winchester, KY 40391
FP 1602 54
Edward O. Guerrant
Guerrant Clinic
Winchester, KY 40391
SU 3441 32
John S. Hubbard
217 So. Main St.
Winchester, KY 40391
GP 1907 53
Harold S. Moberly
110 Ashford Dr.
Winchester, KY 40391
FP 1602 55
Robert H. Scobee
870 Boonesboro Rd.
Winchester, KY 40391
PH 3441 26

Eugene L. Snowden
113 So. Main St.
Winchester, KY 40391
GP 1602 47
Robert E. Strode
OPH 1602 33

CLINTON

Ernest A. Barnes
107 Water St.
Albany, KY 42602
GP 1602 31
Floyd B. Hay
207 E. Cumberland
Albany, KY 42602
GP 4106 39
Larry M. Mason
111 Cross St.
Albany, KY 42602
GP 1612 73
William C. Powell
111 Cross St.
Albany, KY 42602
FP 1612 73

CRITTENDEN

Howard Gregory Maddux
713 So. Main St.
Marion, KY 42064
FP 1602 76

CASEY

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GP 3108 45
Cathryn V. Cornett
County Health Dept.
Liberty, KY 42539
PH 4106 50
John R. Price
Rt. 2 Adams St.
Liberty, KY 42539
FP 1612 74
Garnett J. Sweeney
R. 2 Box 569
Liberty, KY 42539
FP 1602 39
George W. Sweeney
Liberty, KY 42539
FP 1602 51
Lewis E. Wesley
Adams St.
Liberty, KY 42539
FP 1602 56

CARTER

Paul R. Lewis
Scott St.
Olive Hill, KY 41164
GP 1602 65
William H. Matthew
Carter County Clinic
Grayson, KY 41143
FP 1602 69
Harold Shufflebarger
P.O. Box 548
Grayson, KY 41143
GP 1602 52

CUMBERLAND

Samuel Lee Rice
Box AA
Burkesville, KY 42717
FP 4501 76
Joseph Schickel
P.O. Box 217
Burkesville, KY 42717
GP 1602 39
Joseph D. Skipworth
Box AA
Burkesville, KY 42717
FP 1602 74

DAVIESS

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Owensboro, KY 42301
IM 1602 71
Coy E. Ball
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Owensboro, KY 42301
FP 1602 61
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P.O. Box 570
Owensboro, KY 42301
R 4806 56
Irvin Bensman
1343 S.W. Walnut Terrace
Boca Raton, FL 33432
U 4806 33
John E. Bickel
1700 Frederica
Owensboro, KY 42301
PD 1602 44
Garry N. Binegar
2816 Veach Rd.
Owensboro, KY 42301
OPH 3441 66
Jack C. Blackstone
1203 Center St.
Owensboro, KY 42301
OBG 1320 42
Jack C. Blackstone, Jr.
1203 Center St.
Owensboro, KY 42301
OBG 1320 74
William D. Bushong
2816 Veach Rd.
Owensboro, KY 42301
PD 1602 57
Robert D. Byrd
Box 914, Rt. #2
Lewisport, KY 42351
FP 1602 73
James H. Callis
Mayfair Square Bldg.
Owensboro, KY 42301
FP 1602 56
Ritchie L. Clark
918 E. 9th St.
Owensboro, KY 42301
PATH 1320 77
Jack C. Collings
2816 Veach Rd.
Owensboro, KY 42301
FP 1602 55
Randy Cox
1001 Center St. #16
Owensboro, KY 42301
P 1320 76
Robert C. Dalzell, Jr.
2816 Veach Rd.
Owensboro, KY 42301
FP 1602 72
Howell J. Davis
Box 1441
Owensboro, KY 42301
SU 3701 33
Royce E. Dawson
Box 1441
Owensboro, KY 42301
TS 4105 52
Samuel C. Dunlany
2309 Mayfair Dr.
Owensboro, KY 42301
IM 1602 73
Barney E. Elliott, Jr.
2410 Fredericka St.
Owensboro, KY 42301
FP 1602 62
William F. Farrell
2816 Veach Rd.
Owensboro, KY 42301
D 1602 64
Edward P. Feutz
Daviess County Hospital
Owensboro, KY 42301
R 70
William R. Fuqua
2816 Veach Rd.
Owensboro, KY 42301
ORS 1602 58
Thomas G. Furgason
330 Allen St.
Owensboro, KY 42301
FP 1612 73
William R. Gabbert
819 E. 9th St.
Owensboro, KY 42301
PD 3205 46
Elmer A. Gearhart
819 E. Ninth St.
Owensboro, KY 42301
IM 4106 41
Wendell N. Gilbert, Sr.
725 Harvard Dr.
Owensboro, KY 42301
FP 2301 68
R. Glenn Greene
Mayfair Square
Owensboro, KY 42301
IM 4105 54
William W. Hall
Mayfair Square
Owensboro, KY 42301
GP 1602 54
Edwin H. Hanekamp
Mayfair Bldg.
Owensboro, KY 42301
OBG 2434 56
Robert L. Hast
2309 Mayfair Dr.
Owensboro, KY 42301
IM 1320 54
William G. Hayden
1001 Center St. #121
Owensboro, KY 42301
SU 1602 69
Carl Henry
RR 3 P.O. Box 10
Philpot, KY 42366
P 1602 52
Jeffrey S. Hofer
2816 Veach Rd. #102
Owensboro, KY 42301
IM 2403 78
Anne H. Hopwood
421 Allen St.
Owensboro, KY 42301
IM 1320 40
Carroll E. Howard
1700 Frederica St.
Owensboro, KY 42301
PD 2434 61
C. William Jansing
Box 1441
Owensboro, KY 42301
SU 3120 62
Angela L. Jarvis
2816 Veach Rd.
Owensboro, KY 42301
IM 1612 74
Michael Jarvis
2816 Veach Rd.
Owensboro, KY 42301
IM 1602 68
Ann H. Johnson
2430 Hartford Pike
Owensboro, KY 42301
PD 1602 51
Ronald M. Johnson
Mayfair Sq. Bldg.
Owensboro, KY 42301
FP 1602 72
Albert H. Joslin
1001 Center St.
Owensboro, KY 42301
U 1602 54
Joseph M. Kavolus
2816 Veach Rd. 306
Owensboro, KY 42301
ORS 1612 70
John C. Keeley
1001 Center St.
Owensboro, KY 42301
FP 1602 45
Suk Ki Kim
3506 Aristides Dr.
Owensboro, KY 42301
ANES 5088 67
Young Sook Kim
P.O. Box 1026
Owensboro, KY 42301
ANES 5088 74
Clint M. Lacy
Mayfair Sq. Suite 22
Owensboro, KY 42301
OBG 1602 42
Shannon Lamb
2415 No. Stratford Dr.
Owensboro, KY 42301
R 1602 73
John D. Loucks
2816 Veach Rd.
Owensboro, KY 42301
OTO 4701 70
John D. Lovett
1700 Frederica St.
Owensboro, KY 42301
IM 3440 50
Clifton E. Lowry
1001 Center
Owensboro, KY 42301
SU 1602 53
Tom S. Maddox, Jr.
2816 Veach Rd.
Owensboro, KY 42301
OPH 1612 69
William M. McCormack
Box 570
Owensboro, KY 42301
R 1602 61

DAVIESS—EDMONSON—ELLIOTT—ESTILL—FAYETTE

John A. McKay
2816 Veach Rd.
Owensboro, KY 42301
ORS 1602 59
Charles H. McKelvey
4130 Hunting Creek Dr.
Owensboro, KY 42301
U 3440 63
William A. McManus
Box 1441
Owensboro, KY 42301
SU 1602 53
R. Wathen Medley, Jr.
1001 Center St.
Owensboro, KY 42301
IM 1701 63
Loran P. Moore
1001 Center St.
Owensboro, KY 42301
OPH 1602 40
Wayne C. Myers
Box 570
Owensboro, KY 42301
R 4106 68
Donald R. Neel
2816 Veach Rd.
Owensboro, KY 42301
PD 1612 64
Jack R. Newton
2816 Veach Rd.
Owensboro, KY 42301
OBG 1001 70
Patrick A. O'Neill
Daviess Co. Hosp.
Owensboro, KY 42301
EM 1602 55
William J. Oldham
301 Magnolia
Owensboro, KY 42301
ENT 1602 40
M. David Orrahood
2725 Frederica St.
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PATH 2001 47
W. Neil Padgett
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Owensboro, KY 42301
OBG 3901 63
Frederic C. Park
P.O. Box 570
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R 1602 77
Sara J. Parks
330 Allen St.
Owensboro, KY 42301
GP 3709 49
William E. Pearson
1001 Center St.
Owensboro, KY 42301
NS 1602 59
Horace B. Pendleton
2134 Bittel Rd.
Owensboro, KY 42301
IM 1602 50
Reginald J. Phillips
1001 Center St.
Owensboro, KY 42301
SU 1602 48
Clifford A. Poppens
2816 Veach Rd.
Owensboro, KY 42301
IM 2007 75
Dattatraya S. Prajapati
Linkens Bldg.
Owensboro, KY 42301
IM 5088 73
Anwarul Quader
1700 Frederica St. #203
Owensboro, KY 42301
ORS 5088 62

Mack Rayburn
1001 Center St.
Owensboro, KY 42301
OTO 1602 43
David R. Reich
1001 Center St.
Owensboro, KY 42301
N 3501 74
Robert L. Reid
2806 Veach Rd.
Owensboro, KY 42301
ORS 1602 56
Fred C. Reynolds, Jr.
1001 Center St.
Owensboro, KY 42301
ANES 4106 47
Glen D. Richards
1 Executive Blvd., Su LL-5
Owensboro, KY 42301
ANES 1602 63
Bruce W. Riddle
2309 Mayfair Dr.
Owensboro, KY 42301
IM 1320 77
Leslie M. Riherd
2816 Veach Rd.
Owensboro, KY 42301
ORS 301 67
Fred B. Roache
227 W. Ninth
Owensboro, KY 42301
GP 801 34
Marilyn M. Sanders
Mayfair Square
Owensboro, KY 42301
IM 1602 58
Roma J. Sanders
Mayfair Square
Owensboro, KY 42301
SU 902 61
Merrell W. Schell
1001 Center St.
Owensboro, KY 42301
TS 4105 46
Robert H. Schell
1001 Center St.
Owensboro, KY 42301
SU 4105 74
Catherine A. Schmitt
1203 Center St.
Owensboro, KY 42301
OBG 1320 76
Harold J. Schupbach
1001 Center St.
Owensboro, KY 42301
IM 3406 47
Rodney A. Skaggs
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Owensboro, KY 42301
P 1612 76
Bruce C. Smith
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Owensboro, KY 42301
FP 4106 70
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P.O. Box 570
Owensboro, KY 42301
R 1602 58
Elliott P. Stevens
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Owensboro, KY 42301
IM 1602 43
Joseph C. Stiles
2526 Spencer Dr.
Owensboro, KY 42301
ORS 1602 57

Ronald E. Taylor
725 Harvard Dr.
Owensboro, KY 42301
FP 1602 76
William L. Tyler, III
2309 Mayfair Dr.
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IM 1320 65
William G. Ward
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FP 1602 57
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P 1901 52
Lowell K. Westerfield
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FP 1602 68
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OBG 1612 67
Frank H. Wight
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R 1602 52
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PATH 1612 65
William Louis Woolfolk
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Owensboro, KY 42301
ENT 3701 29
Frank L. Yarbrough
2309 Mayfair Dr.
Owensboro, KY 42301
IM 1602 49

EDMONSON

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FP 5088 65
Sidney E. Farmer
Brownsville, KY 42210
FP 1602 47
Marcus B. Wilkes
Wilkes Bldg.
Brownsville, KY 42210
GP 2015 57

ELLIOTT

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Sandy Hook, KY 41171
IM 1602 44
Michael D. Greene
P.O. Box 818-Rt. #1
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GP 412 75

ESTILL

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716 Elm
Ravenna, KY 40472
GP 1602 12
Charles E. Terry
275 N. Court St.
Irvine, KY 40336
GP 4105 65

Virginia Wallace
275 Court St.
Irvine, KY 40336
GP 3701 36

FAYETTE

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ORS 1612 72
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PS 1602 58
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Lexington, KY 40504
ANES 4106 74
Rufus C. Alley
209 Chinoe Rd.
Lexington, KY 40502
27
Andres Alonso
1725 Harrodsburg Rd.
Lexington, KY 40504
IM 5088 54
James W. Anderson
VA Hosp.
Lexington, KY 40507
IM 1206 61
Jerry E. Anderson
310 S. Limestone
Lexington, KY 40508
R 2434 68
Ralph J. Angelucci
2101 Nicholasville Rd.
Lexington, KY 40503
NS 4105 38
Humildad T. Anzures
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Lexington, KY 40503
PD 5088 57
James Apesos
Div. of Plastic Su., UKMC
Lexington, KY 40536
PS 74
Raleigh R. Archer
1725 Harrodsburg Rd.
Lexington, KY 40504
PS 1612 65
Jose A. Avila-Orlandi
1517 So. Limestone
Lexington, KY 40503
R 5088 62
Richard W. Baehler
169 Burt Rd. Suite C and D
Lexington, KY 40503
IM 4803 69
Robert S. Bain
1 St. Joseph Dr.
Lexington, KY 40504
R 4106 56

FAYETTE

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OBG 4701 68
John B. Baldwin
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Lexington, KY 40509
FP 1612 70
Joseph A. Ballard
406 Adair Rd.
Lexington, KY 40502
OTO 2434 45
Ted D. Ballard
1495 Leestown Rd.
Lexington, KY 40505
FP 1602 61
James W. Bard
Lexington Clinic
Lexington, KY 40504
D 4806 58
Joseph P. Bark
1517 So. Limestone
Lexington, KY 40503
D 1612 72
Norman H. Bass
UKMC-Neurology
Lexington, KY 40536
N 0601 62
James R. Bean
Surgery, MS 107, UKMC
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NS 1701 73
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ANES 1612 67
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Lexington, KY 40503
SU 2007 62
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SU 1612 72
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OBG 1612 69
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IM 3441 40
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Frankfort, KY 40601
U 1612 70
Carl E. Shroat
859-B E. Main St.
Frankfort, KY 40601
FP 1602 56
Jim S. Simpson, III
Diag. Rad. Kings Daugh. Hosp.
Frankfort, KY 40601
FP 1001 74
Grace R. Snyder
410 Wapping St.
Frankfort, KY 40601
ENT 4504 26
Sidney R. Steinberg
One Physicians Park
Frankfort, KY 40601
SU 1612 65
John P. Stewart
Stewart School
Frankfort, KY 40601
R 3701 52
Warren G. Stumbo
Rt. 2 So. Benson Rd.
Frankfort, KY 40601
FP 1612 71
Charles R. Taylor
#7 Mills Ln. Rd.
Frankfort, KY 40601
GP 1602 55
Donald B. Thurber
1040 Algonquin Trail
Frankfort, KY 40601
PH 1602 36
Robert W. Young
928 Witthuhn Way
Frankfort, KY 40503
GP 1602 73

FULTON

Glenn F. Bushart
302 Court St.
Fulton, KY 42041
GP 1602 29
Robert W. Bushart
227 Commercial Ave.
Fulton, KY 42041
GP 1602 30
Andrew P. Nelson
Hillview Hosp.
Fulton, KY 42041
GP 4106 60
Robert T. Peterson, Jr.
300 No. Highland
Fulton, KY 42041
GP 4106 59
Jean A. Poe
227 Commercial Ave.
Fulton, KY 42041
GP 4106 40
John W. Ragsdale, Jr.
300 N. Highland
Fulton, KY 42041
GP 4106 57
Russell R. Rudd
222 Commercial
Fulton, KY 42041
GP 3402 28
Richard H. White
629 E. Moulton
Hickman, KY 42050
GP 3713 49

GARRARD

Otto S. Playforth
119 Haselden Heights
Lancaster, KY 40444
FP 1602 51
Colin R. Raitiere
206 Lexington St.
Lancaster, KY 40444
FP 402 77
Paul J. Sides
405 Danville St.
Lancaster, KY 40444
FP 1602 46

GREEN

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Greenburg, KY 42743
GP 1602 63
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SU 1602 54
Harry B. Huntsman
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Greensburg, KY 42743
GP 1602 66
James W. Miller
RFD 1
Greensburg, KY 42743
GP 1602 33
Robert L. Shuffett
Box E
Greensburg, KY 42743
GP 1602 46
William L. Shuffett
102 Public Square
Greensburg, KY 42743
GP 1612 72
Robert P. Simmons
112 S. Public Sq.
Greensburg, KY 42743
GP 1602 63

GREENUP

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Russell, KY 41169
FP 2015 42
Adrian N. Collins
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GP 1602 61
Manuel S. Garcia
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Ashland, KY 41101
SU 5088 57
Clarence I. Haeberle
502 Etna St.
Russell, KY 41169
FP 3401 42
John O. Jones
1108 Powell Ln.
Flatwoods, KY 41139
FP 1602 60
David H. Procter
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South Shore, KY 41175
FP 5088 76
Pravin Shah
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FP 5088 71
Lourente B. Tigas
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PATH 5088 67

GRANT

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R 1602 41
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PD 1602 37
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FP 1602 70
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26 Ridgeview Dr.
Dry Ridge, KY 41035
FP 1602 78
Frederick R. Scroggin
McBee Bldg.
Dry Ridge, KY 41035
GP 3441 41
Darl B. Shipp
22 Broadway
Dry Ridge, KY 41035
FP 1602 60
Claude C. Waldrop
Rt. 3
Williamstown, KY 41097
GP 1602 42

GRAVES

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Mayfield, KY 42066
GP 1602 39
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U 3702 67
Clem F. Burnett, Jr.
220 W. Walnut St.
Mayfield, KY 42066
IM 4504 49
Richard L. Colley
203 E. North St.
Mayfield, KY 42066
FP 1602 50
Francis J. Dillard
220 W. Walnut
Mayfield, KY 42066
IM 4504 49
Robert D. Fields
220 W. Walnut St.
Mayfield, KY 42066
SU 4106 66
Larry L. Hall
P.O. Box K
Mayfield, KY 42066
GP 4106 63
Donald C. Haugh
220 W. Walnut St.
Mayfield, KY 42066
SU 3440 39
Charles E. Howard
220 W. Walnut St.
Mayfield, KY 42066
FP 2434 65
Billy G. Jackson
Morgan-Haugh Clinic
Mayfield, KY 42066
FP 1602 59
Charles D. LeNeave
Community Hosp.
Mayfield, KY 42066
R 1602 57
Jacob M. Mayer
1213 W. Broadway
Mayfield, KY 42066
SU 4105 31
Michael H. McBee
220 W. Walnut
Mayfield, KY 42066
SU 1612 73
Clarence J. Mills
Mayfield Clinic/23 E. North St.
Mayfield, KY 42066
GP 1602 61
A. Reeves Morgan
220 W. Walnut
Mayfield, KY 42066
ENT 1602 46
Robert A. Orr
105 E. North St.
Mayfield, KY 42066
OBG 4106 36
Harry M. Roach
107 W. Broadway
Mayfield, KY 42066
GP 1502 40
James S. Robbins
105 E. North St.
Mayfield, KY 42066
GP 4106 39
Martha C. Robinson
220 W. Walnut St.
Mayfield, KY 42066
GP 1612 68
William B. Simpson
220 W. Walnut
Mayfield, KY 42066
OBG 4106 45
Joseph C. Slaughter
620 Blackusburg Rd.
Mayfield, KY 42066
IM 1612 75
Walter J. Slizofski
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Mayfield, KY 42066
R 4105 74
Thomas B. Stone
105 E. North St.
Mayfield, KY 42066
PD 4105 41

Henry Viles
206 W. South St.
Mayfield, KY 42066
P 5088 68
Wayne E. Williams
Medical Arts Ctr.
Mayfield, KY 42066
FP 1602 78

GRAYSON

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305 W. Market St.
Leitchfield, KY 42754
GP 1602 44
Ray A. Cave
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Leitchfield, KY 42754
FP 1620 60
Victor F. Duvall
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Clarkson, KY 42726
FP 1602 67
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PD 1620 73
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FP 1602 75
Ralph G. Thomas
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SU 3406 47

HANCOCK

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GP 1602 53
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NS 5088 70

HENDERSON

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PD 1620 71
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FP 1320 61
Randall S. Brown
1413 N. Elm St.
Henderson, KY 42420
FP 4202 75
Noel D. Canlas
Bx. 1098
Henderson, KY 42420
IM 5088 69
Donald A. Cantley
110 Third St.
Henderson, KY 42420
PD 102 51
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R 1612 69
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PATH 5088 49
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EM 1602 59
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SU 5088 67
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OBG 4106 60
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Henderson, KY 42420
ORS 2204 75
Auddie C. Kennedy
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Henderson, KY 42420
GP 1602 54
Seong Soo Kim
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TS 5088 65
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1602 67
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SU 801 38
Allan M. Korn
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IM 2007 70
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SU 102 58
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OTO 1612 67
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FP 4105 61
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SU 5088 69
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R 4105 54
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Atkinson Park
Henderson, KY 42420
GP 1602 60
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EM 1602 66
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GP 4106 32
Walter L. O'Nan
1413 No. Elm-P.O. Box 315
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GP 2434 30
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OBG 1612 73
John Rashidian
1413 N. Elm St.
Henderson, KY 42420
OBG 5088 75
Jason T. Samuel
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Henderson, KY 42420
IM 5088 63
Millard R. Shaw
1208 Tarancy
Henderson, KY 42420
IM 4301 44
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ANES 1720 71
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Rt. #1
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ORS 5088 56
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OBG 1612 70
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OPH 1612 67
Molly G. Veal, Jr.
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Henderson, KY 42420
IM 1602 48
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Henderson, KY 42420
FP 1602 73
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Henderson, KY 42420
R 1211 58
T. Paul Wilder
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FP 1602 70
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U 5088 59

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Eminence, KY 40019
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New Castle, KY 40050
FP 1602 72
Wyatt Norvell
312 So. Main St.
New Castle, KY 40050
FP 1602 41

HOPKINS

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ORS 802 48
Wallace R. Alexander
Trover Clinic
Madisonville, KY 42431
IM 4106 54
Marion E. Arnold
Trover Clinic
Madisonville, KY 42431
FP 1602 51
Christine A. Asher
Trover Clinic
Madisonville, KY 42431
Richard K. Bachman
Trover Clinic
Madisonville, KY 42431
PD 1602 64
James L. Beck
Trover Clinic
Madisonville, KY 42431
R 1602 60
James M. Bowles
Trover Clinic
Madisonville, KY 42431
FP 1602 76
John R. Brewer
Trover Clinic
Madisonville, KY 42431
PD 3701 63
Mark R. Campbell
Trover Clinic
Madisonville, KY 42131
J. Patrick Casey
Trover Clinic
Madisonville, KY 42431
Eugene A. Castle
Trover Clinic
Madisonville, KY 42431
OBG 3501 53
Arvil G. Catlett
Trover Clinic
Madisonville, KY 42431
FP 1602 79
Herbert Chaney
317 So. Main St.
Madisonville, KY 42431
FP 1602 56
William H. Clapp
Trover Clinic
Madisonville, KY 42431
FP 1612 75
Gerald Clark
Trover Clinic
Madisonville, KY 42431
OPH 1320 65
James A. Clarke
Trover Clinic
Madisonville, KY 42431
C 3712 54
Selby E. Coffman
Trover Clinic
Madisonville, KY 42431
R 1602 50
David Alan Compton
Trover Clinic
Madisonville, KY 42431
FP 1612 80
R. P. Corpus
Trover Clinic
Madisonville, KY 42431
PATH 5088 69

HOPKINS

Udaykant V. Dave
Trover Clinic
Madisonville, KY 42431
OTO 5088 60

Gary Wade Davis
Trover Clinic
Madisonville, KY 42431
FP 1602 80

Harry O. De Bandi
Trover Clinic
Madisonville, KY 42431
U 4106 61

Vinna Rhea Denison
Trover Clinic
Madisonville, KY 42431
FP 1602 80

Charles R. Dodds
Trover Clinic
Earlington, KY 42410
FP 4106 71

George E. Dodson
Trover Clinic
Madisonville, KY 42431
OBG 3713 53

James M. Donley
Trover Clinic
Madisonville, KY 42431
ORS 2434 69

Robert G. Drake
Trover Clinic
Madisonville, KY 42131

Robert J. Emslie
Trover Clinic
Madisonville, KY 42431
IM 3207 75

Charles R. Fisher
Trover Clinic
Madisonville, KY 42431
FP 1602 53

James A. Freeman
317 So. Main
Dawson Springs, KY 42408
FP 1901 40

Robert L. Fulton
Trover Clinic
Madisonville, KY 42431
SU 2402 64

Scott Gaines
210 Oakwood
Earlington, KY 42410
FP 1612 80

Thomas A. Gallo
4020 Buffalo Trace
Madisonville, KY 42431
IM 3441 67

Howard M. Gendell
Trover Clinic
Madisonville, KY 42431
NS 4701 72

William L. Gibson
Trover Clinic
Madisonville, KY 42431
FP 5088 80

Jack L. Hamman
Trover Clinic
Madisonville, KY 42431
TS 4106 57

Danny R. Hatfield
Trover Clinic
Madisonville, KY 42431
R 1612 75

Stephanie R. Hatfield
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Madisonville, KY 42431
PATH

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FP 1602 56

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Madisonville, KY 42431
IM 802 70

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D 1243 72

Thomas L. Herrmann
Trover Clinic
Madisonville, KY 42431
P 1245 76

Cynthia R. Hines
Trover Clinic
Madisonville, KY 42431
IM 4106 72

Ralph C. Hines
Trover Clinic
Madisonville, KY 42431
IM 3713 64

Robert L. Hoffman
Trover Clinic
Madisonville, KY 42431
PD 3441 48

William R. Jernigan
Trover Clinic
Madisonville, KY 42431
SU 4106 55

Alan G. Johnson
Trover Clinic
Madisonville, KY 42431
P 2402 56

James L. Johnson
Trover Clinic
Madisonville, KY 42431
C 1602 75

Elias E. Kawas
Trover Clinic
Madisonville, KY 42431
PATH 3119 53

Cary T. Kirk
Trover Clinic
Madisonville, KY 42431
OBG 1602 77

William H. Klompus
Trover Clinic
Madisonville, KY 42431
U 3109 59

Abdulkader M. Kulam
Trover Clinic
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ANES 5088 74

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Madisonville, KY 42431
FP 1211 50

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FP 2107 57

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FP 4507 76

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Trover Clinic
Madisonville, KY 42431

Tristan K. Lineberry
Trover Clinic
Madisonville, KY 42431
FP 1602 80

David M. Lolley
Trover Clinic
Madisonville, KY 42431
GP 1701 68

Jon R. Love
Trover Clinic
Madisonville, KY 42431
ORS 3712 56

Virgil W. Lowe
Trover Clinic
Madisonville, KY 42431
PD 1005 61

Merle M. Mahr
Trover Clinic
Madisonville, KY 42431
SU 3120 45

Srinivasan S. Mani
Trover Clinic
Madisonville, KY 42431
N 5088 65

M. Ernest Marshall
Trover Clinic
Madisonville, KY 42431
IM 4501 75

Dan A. Martin
Trover Clinic
Madisonville, KY 42431
PH 2001 52

Gerald F. Meier
Trover Clinic
Madisonville, KY 42431
NS 2101 62

Joseph L. Milburn
Trover Clinic
Madisonville, KY 42431
SU 4106 58

Frank B. Miller
Trover Clinic
Madisonville, KY 42431
SU 69

Harold M. Miller
Hopkins Co. Hosp.
Madisonville, KY 42431
EM 415 72

Vickie S. Moore
Trover Clinic
Madisonville, KY 42131
FP 78

James E. Nell
Trover Clinic
Madisonville, KY 42131
FP 80

Allan E. Nickel
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Madisonville, KY 42431
IM 3440 75

Susan P. Nickel
Trover Clinic
Madisonville, KY 42431
PD 3440 80

John W. Pate
Trover Clinic
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OPH 301 52

Gary R. Plotkin
Trover Clinic
Madisonville, KY 42431
IM 2905 72

Vaclav I. Pokorny
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R 5088 57

Abigail V. Rayner
Trover Clinic
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FP 903 77

G. Scott Reader
Trover Clinic
Madisonville, KY 42431
IM 3106 73

Joseph E. Roe
Trover Clinic
Madisonville, KY 42431
SU 4106 62

James L. Salmon
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GP 4105 32

Frederick A. Scott
Trover Clinic
Madisonville, KY 42431
ANES 1602 38

Manojkumar Shah
Trover Clinic
Madisonville, KY 42431
OBG 5088 71

Mohitkumar K. Sheth
Trover Clinic
Madisonville, KY 42431
IM 5088 71

Dennis G. Shoff
Trover Clinic
Madisonville, KY 42431
OBG 1701 76

Archibald F. Shuler
Trover Clinic
Madisonville, KY 42431
OTO 1005 61

James R. Smith
Trover Clinic
Madisonville, KY 42431
FP 1612 79

Carroll M. Steinfeld
Trover Clinic
Madisonville, KY 42431
GP 1602 63

Allan K. Stryker
Trover Clinic
Madisonville, KY 42431
PS 1602 72

Bradley C. Stufflebam
Trover Clinic
Madisonville, KY 42431
R 2403 75

Frank H. Taylor
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Madisonville, KY 42431
PUD 74

Paul M. Taylor
Trover Clinic
Madisonville, KY 42431
FP 1602 59

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Madisonville, KY 42431
PD 1602 49

Loman C. Trover
Trover Clinic
Madisonville, KY 42431
ADM 1602 47

Philip Loman C. Trover
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Madisonville, KY 42431
R 1612 76

Mack Tyner, III
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FP 903 78

Curtis W. Van Hooser
Trover Clinic
Madisonville, KY 42431
IM 4106 62

Melap S. Vijayaraghavan
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Madisonville, KY 42431
IM 5088 74

Harry P. M. Vontobel
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PD 1320 70

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Madisonville, KY 42431
OPH 4202 75

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ANES 5088 63
Eric C. Wilson
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PATH 1320 68
Randy L. Wolfe
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Madisonville, KY 42431
IM 1320 73

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ANES 5088 63
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OBG 1612 72
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ANES 5088 58
Antero J. Avenido
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FP 1602 52
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OBG 4701 63
William M. Carney
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E'town, KY 42701
PATH 1602 66
William D. Caso
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P 3119 58
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GP 1602 56
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FP 1602 62
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IM 1602 60
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ORS 1602 74
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E'town, KY 42701
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GP 1602 58
Willard A. Litzenberger
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IM 2001 44
Terrell D. Mays
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OBG 1602 63
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IM 5088 57
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OBG 1612 72
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R 4805 69
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U 1612 71
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OPH 1705 62

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PATH 3713 53
William Bechtold
Daniel Boone Clinic
Harlan, KY 40831
2434 70
Philip J. Begley
315 Central St.
Harlan, KY 40831
FP 4105 39
William E. Bowers
Daniel Boone Clinic
Harlan, KY 40831
SU 3501 55
Jerry M. Bryson
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Harlan, KY 40831
OPH 4106 62
Harry K. Buttermore
6712 10th Ave.
Bradenton, FL 33505
GP 1602 17
Samuel L. Cooke
917 W. Muncy Ave.
Durham, NC 27704
ENT 4504 29
Jack W. Cope
Lynch Medical Service
Lynch, KY 40855
GP 1612 74
T. Garrett Craft
441 Mound St.
Harlan, KY 40831
FP 1602 45
Loreto L. Crisologo
Holiday Apts., Apt. 083
Harlan, KY 40831
EM 5088 50
Abdulkader Dahhan
Daniel Boone Clinic
Harlan, KY 40831
PUD 5088 64
Samir Dawoud
Daniel Boone Clinic
Harlan, KY 40831
ORS 5088 60
Howard L. Elliot
176E. Paseo de Golf
Green Valley, AZ 85614
ANES 5088 29
Rachel R. Eubank
Daniel Boone Clinic
Harlan, KY 40831
FP 1612 66
Lowell D. Gilley
Lynch Medical Service
Lynch, KY 40855
GP 1612 76
Murphy H. Green
Daniel Boone Clinic
Harlan, KY 40831
U 4105 63
Samir A. Guindi
Daniel Boone Clinic
Harlan, KY 40831
ENT 5088 64
Paul E. Hodel
Daniel Boone Clinic
Harlan, KY 40831
ANES 1206 61
Gordon Hollins
Daniel Boone Clinic
Harlan, KY 40831
PD 4105 59
Robert S. Howard
P.O. Drawer Dr.
Harlan, KY 40831
SU 1602 34
James K. Hurlocker
Daniel Boone Clinic
Harlan, KY 40831
OBG 4106 56
Wilfred F. Jones
Daniel Boone Clinic
Harlan, KY 40831
IM 2001 51
Yung Poe Lee
Daniel Boone Clinic
Harlan, KY 40831
OBG 5088 67
Anthony F. Leger
Daniel Boone Clinic
Harlan, KY 40831
IM 5088 53

John D. Miller
Clover Fork Clinic
Evarts, KY 40828
IM 1403 70
Albino G. Nunez
Daniel Boone Clinic
Harlan, KY 40831
GP 5088 58
Thomas D. Pruitt
Daniel Boone Clinic
Harlan, KY 40831
OPH 1701 54
Prudencio Y. Reyes
Appalachian Reg. Hosp.
Harlan, KY 40831
GP 5088 54
John J. Salter
Appalachian Reg. Hosp.
Harlan, KY 40831
PATH 2434 39
Suresh C. Saxena
Daniel Boone Clinic
Harlan, KY 40831
PD 5088 63
Milo H. Schosser
Lynch Medical Service
Lynch, KY 40855
GP 1211 40
Truman D. Simmons
Harlan Appalachian Reg. Hosp.
Harlan, KY 40831
R 1705 52
Richard G. Stoltzfus
Daniel Boone Clinic
Harlan, KY 40831
IM 3709 66
F. E. VanGeloven
Daniel Boone Clinic
Harlan, KY 40831
Louis F. Vieillard
Daniel Boone Clinic
Harlan, KY 40831
ANES 3106 46
Paul M. Walstad
Daniel Boone Clinic
Harlan, KY 40831
TS 2204 44
Paul O. Wells
Appalachian Reg. Hosp.
Harlan, KY 40831
R 502 34
Kenneth R. Wier
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Lynch, KY 40855
GP 4106 64
John H. Willard
Angel Dr.
Sanibel, FL 33957
IM 3701 27
Loyal K. Wilson
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ORS 3712 39
Mohammad Yaqub
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Harlan, KY 40831
D 5088 65
Philip J. Zurlo
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Harlan, KY 40831
U 3109 59

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FP 1612 75
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SU 5088 63
John G. Cooper
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FP 1602 78
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GP 1602 63
H. Tod Smiser
Church St.
Cynthiania, KY 41031
GP 1602 30
Donald R. Stephens
437 E. Pleasant
Cynthiana, KY 41031
FP 1602 60
Wilbur H. Wilson
428 E. Pleasant St.
Cynthiana, KY 41031
GP 3441 64
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FP 1602 62

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GP 2415 41
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FP 5088 60

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SU 1602 45

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OBG 1602 77

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GP 1602 31

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IM 1602 64

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SU 1602 37

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Louisville, KY 40206
PATH 1602 26

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GP 1602 31

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P 1602 60

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SU 102 68

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306 S.W. Jeff. Prof. Bldg.
Louisville, KY 40272
SU 1602 74

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Louisville, KY 40207
IM 1602 76

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1602 32
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OTO 1005 64
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Louisville, KY 40225
OM 1901 47
Charles L. Bloch
409 Medical Towers No.
Louisville, KY 40202
ENT 1602 37
W. Austin Bloch
1207 Heyburn Bldg.
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IM 2001 33
J. Bradford Block
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William A. Blodgett
506 Fincastle Bldg.
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IM 3101 44
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R 1901 58
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Evansville, IN 47715
ORS 1602 58
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OBG 1602 75
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PH 1602 53
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OTO 1602 40
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OBG 1602 54
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NS 1602 67
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FP 3205 63
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PD 5088 35
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OPTH 1602 80
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Delbert G. Hoffman
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GP 1602 30
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IM 1602 76
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PATH 1612 74
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Baptist E Doctors Bldg.
Louisville, KY 40207
OBG 1602 63
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PD 1602 70
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OBG
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FP 1602 69
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Covington, KY 41014
P 1243 51
Henry A. Wells
619 Buttermilk Pike
Covington, KY 41011
A 3901 64
Edgar D. Wippermann
3161 Dixie Hwy.
Erlanger, KY 41018
OTO 4805 47
John R. Woodyard
3161 Dixie Hwy.
Erlanger, KY 41018
OTO 3441 45
Dorothy B. Worcester
108 Fayette Circle
Covington, KY 41011
GP 1206 36
Ben T. Yamaguchi
3104 Dixie Hwy.
Erlanger, KY 41018
PATH 60
Vincent E. Ziegler
210 Thomas More Pkwy.
Crestview Hills, KY 41017
P 1612 72

KNOTT

Denzil G. Barker
Hindman, KY 41822
FP 1701 42
Gene T. Watts
Hindman, KY 41822
FP 1602 56

KNOX

Corazon B. Acosta
Barbourville Clinic
Barbourville, KY 40906
IM 5088 62
Rogelio A. Acosta
Barbourville Clinic
Barbourville, KY 40906
SU 5088 61
Harold L. Bushey
406 Knox St.
Barbourville, KY 40906
IM 3145 54
Rufino F. Crisostomo
321 High St.
Barbourville, KY 40906
OBG 5088 61
Raymond E. Hayden
320 High St.
Barbourville, KY 40906
PD 2434 58
Violetta T. Hayden
320 High St.
Barbourbille, KY 40906
PD 5088 56
Raju N. Vora
Knox County General Hosp.
Barbourville, KY 40906
IM 5088 74

LAWRENCE

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Louisa Medical Clinic
Louisa, KY 41230
FP 1602 49
Cesar G. Ortines
Louisa Community Hosp.
Louisa, KY 41230
OBG 5088 64
Venkateswara R. Sola
Louisa Community Hosp.
Louisa, KY 41230
R 5088 71

LEE

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R 1602 49
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General Delivery
Beattyville, KY 41311
GP 4106 62

LESLIE

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Frontier Nursing Service
Hyden, KY 41749
FP 3106 50

LETCHER

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Blackey, KY 41804
GP 4106 43
Ruby C. Alonzo
107 E. Main
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PATH 71
Vincent C. Arroz
Daniel Boone Clinic
Whitesburg, KY 41858
SU 5088 58
Paul H. Buller
Daniel Boone Clinic
Harlan, KY 40831
FP 78
Cedric Craig
Daniel Boone Clinic
Whitesburg, KY 41858
PD 5088 63
James Forrester
107 E. Main St.
Whitesburg, KY 41858
OBG 1602 75
Christopher T. Haas
600 Jenkins Rd.
Whitesburg, KY 41858
FP 3440 76
Charles A. Judge, III
ARH
Whitesburg, KY 41858
IM 802 78
Arthur J. Nash
Jenkins Clinic
Jenkins, KY 41537
ANES 406 52
Carl Pigman
P.O. Box 390
Whitesburg, KY 41858
GP 1901 36
Avelina J. Sembillo
301 Soloman Rd.
Whitesburg, KY 41858
GP 5088 57
Richard V. Stevenson
P.O. Box 126
Whitesburg, KY 41858
SU 1211 36
Abubakar H. Tidal
Daniel Boone Clinic
Whitesburg, KY 41858
IM 5088 70
Juan Valdez
Jenkins Clinic
Jenkins, KY 41537
GP 47

LEWIS

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GP 1602 39

LINCOLN

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FP 1612 71
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Stanford, KY 40484
FP 1612 71
Charles E. Crase
126 Portman Ave.
Stanford, KY 40484
FP 1612 72
Wilbur A. Heinz
Ft. Logan Hosp.
Stanford, KY 40484
R 4105 62
Linda S. Milholen
126 Portman
Stanford, KY 40484
SU 1005 74
William M. Rice
126 Portman Ave.
Stanford, KY 40484
FP 1612 77

LIVINGSTON

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Highway 60
Salem, KY 42078
GP 1602 62
Stephen Burkhart
Salem, KY 42078
FP 1602 55
Roscoe Faulkner
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Salem, KY 42078
GP 4106 30
Michael P. Gavin
Livingston Co. Hosp.
Salem, KY 42078
PD 1211 76

LOGAN

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FP 1602 43
James C. Dodson
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IM 1701 76
John P. Glenn
151 W. Fifth St.
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SU 1602 32
Jack B. Holt
157 W. Fifth St.
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SU 4105 59
Lewis E. Martin
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GP 1602 63
Charles H. Mathis
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FP 4106 60
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OBG 5088 65
Thomas G. Threlkeld
709 E. 4th St.
Russellville, KY 42276
GP 1602 53
Dewey E. Wood
210 S. Bethel St.
Russellville, KY 42276
FP 1602 60

LAUREL

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London, KY 40741
GP 1602 46
George W. Barr
Rt. 12 B1 442
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FP 5088 76
Claude B. Ison
Rt. 10
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GP 1612 35

Boyce E. Jones
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PUD 1602 43
William D. Pratt
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FP 1612 67
Robert A. Prots
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SU 3406 62
Gopal K. Rastogi
Medical Arts Bldg.
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IM 5088 58
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FP 1701 55
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527 West Main St.
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GP 1602 49
Don E. Cloys
University Shopping Ctr.
Richmond, KY 40475
SU 1612 67
James T. Coy, III
310 Geri Ln.
Richmond, KY 40475
ORS 1612 72
Suvas G. Desai
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Richmond, KY 40475
U 5088 67
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ANES 1602 54
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PH 1602 66
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Richmond, KY 40475
SU 1612 69
Elzer T. Fuller, Jr.
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Richmond, KY 40475
FP 1612 76
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Berea, KY 40403
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OBG 1602 72
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SU 1612 70
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ENT 2007 34
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FP 1612 67
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OBG 1612 68
Stuart Tobin
230 Geri Ln.
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D 2403 71
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ORS 2101 68

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GP 1602 40
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GP 1602 38
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OPH 1612 73
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U 1320 74
Donald R. Wilson
1 McDonald Pkwy.
Maysville, KY 41056
OBG 1612 76
Phillip H. Yunker
Browning Med. Bldg.
Maysville, KY 41056
FP 1602 72

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Sacramento, KY 42372
FP 1602 55
Samuel E. Scott
Livermore, KY 42352
FP 4105 57
Hugh H. Wilhite
Calhoun, KY 42327
FP 1602 66

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P 1602 60
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Paducah, KY 42001
R 1612 75
Frederick D. Austin, III
4025 Buckner Ln.
Paducah, KY 42001
IM 3201 67
Ronald G. Barlow
Western Baptist Hosp.
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EM 1602 75
W. Winston Barnard
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P 4106 51
Joseph A. Bassi
Rt. 6-378 Jewell Ln.
Paducah, KY 42001
IM 2434 77
Charles B. Billington
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IM 4106 34
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Paducah, KY 42101
GP 2006 44
William N. Blalock
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Paducah, KY 42001
GE 2402 52
Chester M. Blanton
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D 1602 33
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R 1005 68
Theodore Borodofsky, Jr.
1903 Broadway
Paducah, KY 42001
OPH 4106 69
Benjamin F. Bradford
2330 Broadway
Paducah, KY 42001
IM 1705 48
William H. Brigance
220 Lone Oak Rd.
Paducah, KY 42001
U 1701 64
Collins D. Brown
Lourdes Hosp.
Paducah, KY 42001
R 1612 65
William M. Bruce
617 No. 30th St.
Paducah, KY 42001
John C. Burris
P.O. Box 1530
Paducah, KY 42001
R 1602 56
Woody G. Burrow
3021 Lone Oak Rd.
Paducah, KY 42001
FP 4106 61
Carey W. Campbell
St. 1001, Citizens Bank Bldg.
Paducah, KY 42001
NS 2301 64

Harry W. Carloss
1532 Lone Oak Rd.
Paducah, KY 42001
GP 1602 76
Glenn S. Chaney
617 N. 30th St.
Paducah, KY 42001
PD 1602 74
Sally H. Chaney
2226 Broadway
Paducah, KY 42001
OBG 1602 74
Willard F. Chumley
2501 Kentucky Ave.
Paducah, KY 42001
R 1602 56
Kenneth G. Cook
1532 Lone Oak Rd. #4
Paducah, KY 42001
FP 1211 77
Frank B. Crawford
2421 Broadway
Paducah, KY 42001
R 3205 50
Wm. H. Culbertson, Jr.
220 Berger Rd.
Paducah, KY 42001
IM 1602 76
Theodore E. Davies
P.O. Box 1245
Paducah, KY 42001
NS 1602 71
Charles K. Davis
2515 Broadway
Paducah, KY 42001
SU 4105 64
Edwin T. Davis
2320 Broadway
Paducah, KY 42001
PD 2434 56
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ANES 1320 68
Jack D. Diles
Western Baptist Hosp.
Paducah, KY 42001
IM 1211 73
Sidney P. Edds
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Paducah, KY 42001
GP 4106 51
James C. Embry
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FP 4106 52
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Paducah, KY 42001
OBG 1612 76
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S 1602 43
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OBG 1320 67
Samuel L. French
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Paducah, KY 42001
ORS 1901 43
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Paducah, KY 42001
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Paul J. Grumley
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IM 1692 76

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P 5088 58
James S. Gwinn, Jr.
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C 1602 74
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SU 1602 45
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IM 1602 44
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ENT 301 71
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OBG 3113 29
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Paducah, KY 42001
IM 2402 53
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GP 1602 61
William H. Hosbach
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SU 2434 56
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Paducah, KY 42001
FP 4105 66
Mohammad Yaser Jaafar
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Paducah, KY 42001
IM 5088 72
William E. Jackson
220 Berger Rd.
Paducah, KY 42001
IM 1602 65
J. Jeff Johnson
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Paducah, KY 42001
OPH 301 62
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OBG 2101 46
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SU 1320 73
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PS 802 67
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P 1602 68
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OBG 5088 63
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ANES 1320 77

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U 1612 69
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PATH 2007 44
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SU 1602 71
Gary L. McMillan
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D 4701 68
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NS 1701 73
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Paducah, KY 42001
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PD 1320 60
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IM 4204 73
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GP 1602 47
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GP 3207 37
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GP 3207 43
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GP 1602 65

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GP 1602 57
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Mary L. Eastham
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GP 3207 62
Lon E. Roberts, Jr.
250 Foxglove Dr., Suite #7
Mt. Sterling, KY 40353
IM 1612 76
Robert J. Salisbury
P.O. Box 830
Mt. Sterling, KY 40353
FP 1602 53
Frank K. Sewell
P.O. Box 428
Mt. Sterling, KY 40353
FP 4105 33
Stephen M. Spires
25 E. High St.
Mt. Sterling, KY 40353
U 1612 72
Janet M. White
Cave Run Clinic
Mt. Sterling, KY 40353
FP 4501 77

MORGAN

George R. Bellamy
No. Main St.
West Liberty, KY 41472
GP 1602 57
Jose M. Cordero
Appalachian Regional Hosp.
McDowell, KY 41647
R 5088 59
James D. Frederick
Morgan Co. Appalachian Hosp.
West Liberty, KY 41472
IM 1602 72
Morris L. Peyton
Appalachian Reg. Hosp.
West Liberty, KY 41472
FP 1602 56
Alec Spencer
West Liberty, KY 41472
GP 1602 40
William J. Stamper
Rt. 1 Box 30
West Liberty, KY 41472
FP 1612 75

MARSHALL

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P.O. Box 384
Benton, KY 42025
R 1701 53
William J. Colburn
Calvert City Clinic
Calvert City, KY 42029
GP 1602 52
William R. Colburn
Calvert City Clinic
Calvert City, KY 42029
GP 1602 75
Keith E. Ellis
500 E. 9th St.
Benton, KY 42025
FP 1602 62

MARSHALL—MARION—MARTIN—MUHLENBERG—NICHOLAS—NELSON—OHIO—OLDHAM—OWEN—OWSLEY—PERRY

H. W. Ford
500 E. 9th St.
Benton, KY 42025
FP 1602 62
Wendell E. Gordon
Ninth & Poplar St.
Benton, KY 42025
GP 4106 59
James E. Holmes
1315 Main St.
Benton, KY 42025
GP 1504 75
Harold L. King
500 E. 9th St.
Benton, KY 42025
GP 4106 51
Joseph R. Miller
1405 Main St.
Benton, KY 42025
FP 1602 42
Paul W. Schaper
500 E. 9th St.
Benton, KY 42025
SU 2403 59
Carroll W. Traylor
1447 Fifth Ave.
Calvert City, KY 42029
GP 1005 54

MARION

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214 S. Proctor Knott
Lebanon, KY 40033
SU 3709 29
Edward C. Bowling
310 W. High St.
Lebanon, KY 40033
SU 1602 52
Robert D. Eastridge
214 S. Proctor Knott Ave.
Lebanon, KY 40033
SU 4106 44
Eli J. George
365 N. Spalding Ave.
Lebanon, KY 40033
FP 1602 43
Salem M. George
129 West Chandler St.
Lebanon, KY 40033
FP 1602 59
John W. Ratliff
High St.
Lebanon, KY 40033
FP 1602 53
Duncan G. Salot
137 E. Main St.
Lebanon, KY 40033
ENT 2107 28
Brian F. Scott
St. Mary's Rd.
Lebanon, KY 40033
GP 5088 79
A. Arthur Steele
Larit Ln., Route 2
Lebanon, KY 40033
IM 1901 71
Robert H. Wilber
146 E. Main St.
Lebanon, KY 40033
FP 1602 58

MARTIN

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Doctors Bldg.
Inez, KY 41224
FP 1612 65

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Greenville, KY 42345
EM 1602 56
Joseph R. Boggess
P.O. Box 321
Greenville, KY 42345
GP 1602 64
James S. Brashear
Medical Bldg. Legion Dr.
Central City, KY 42330
GP 1602 61
George F. Brockman
Greenville Clinic
Greenville, KY 42345
IM 1602 35
Ronilo D. Diaz
Greenville Clinic
Greenville, KY 42345
SU 5088 63
Gary D. Givens
Medical Bldg.
Central City, KY 42330
IM 4106 65
Brook G. Hicks
440 Hopkinsville St.
Greenville, KY 42345
FP 1612 69
Slobodan B. Jugo
Muhlenberg Comm. Hosp.
Greenville, KY 42345
SU 5088 71
Willard L. Keith
7 Rolling Hills
Greenville, KY 42345
EM 1612 74
William R. McGhee
Greenville Medical Clinic
Greenville, KY 42345
IM 1612 75
William L. Miller
Muhlenburg Comm. Hosp.
Greenville, KY 42345
PATH
George H. Rodman
So. Cherry St.
Greenville, KY 42345
SU 2434 40
Charles J. Shipp
Greenville Clinic
Greenville, KY 42345
FP 1602 53
Valentino S. Simpao
Legion Dr.
Central City, KY 42330
GP 5088 57
Gaithel L. Simpson
South Cherry St.
Greenville, KY 42345
SU 1602 31
Joseph D. Stokes
Box 386
Greenville, KY 42345
R 1602 57
Hylan H. Woodson
P.O. Box 230
Greenville, KY 42345
GP 1602 45

NICHOLAS

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So. Broadway
Carlisle, KY 40311
GP 1612 68
Wendell R. Kingsolver
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Carlisle, KY 40311
FP 2101 52
Jack T. Morford
110 Broadway St.
Carlisle, KY 40311
GP 1602 45

NELSON

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IM 2434 68
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Flaget Hosp.
BArdstown, KY 40004
SU 1602 54
M. Douglas Gossman
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FP 1602 71
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FP 1602 76
Fredericka C. Lockett
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IM 1612 75
John J. Sonne
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Bardstown, KY 40004
SU 1602 42
Charles B. Spalding
201 So. Fifth St.
Bardstown, KY 40004
FP 1602 53
Henry S. Spalding
201 So. Fifth St.
Bardstown, KY 40004
FP 1602 57
Kenneth L. Stinnette
201 So. Fifth St.
Bardstown, KY 40004
FP 1602 45
Ronald D. Weddle
201 So. Fifth St.
Bardstown, KY 40004
FP 1612 73
Emmett W. Wood
607 No. Third St.
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FP 4106 59

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SU 5088 57
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PATH 5088 59
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OBG 3709 60
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OPH 5088 71
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GP 80
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IM 1602 66
Max P. Jones
206 Caroline
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IM 1602 44
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Pikeville Medical Bldg.
Pikeville, KY 41501
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Rachpal S. Kukreja
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OPH 5088 66
Oon Leedhanachoke
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OPH 1602 44
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OBG 3101 44
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Pikeville, KY 41501
FP 3201 57
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Town & Country Plaza
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P 5088 69
Pairoj Ruktanonchai
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Pikeville, KY 41501
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P 1602 60
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GP 2494 67
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Pikeville, KY 41501
GP 4106 62
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OTO 1602 56
Oscar W. Thompson
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IM 1602 55
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ANES 5088 63
Manosh Vongvises
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OTO 5088 72
Charles F. Wilson
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OPH 1602 44
Mary L. Wiss
Pikeville Medical Bldg.
Pikeville, KY 41501
SU 802 53

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FP 1602 54
William M. Townsend
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Melbourne Beach, FL 32951
GP 1602 34
Carl A. Waldemayer
John's Rd.
Butler, KY 41006
PH 43
David W. Walsh
Pendleton Co. Hosp.
Falmouth, KY 41040
FP 3501 71

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FP 1612 68
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FP 1602 63

PULASKI

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OBG 1602 57
James R. Biggs, Jr.
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Somerset, KY 42501
R 1612 65
Glenn K. Blackburn, Jr.
401 Bogle St.
Somerset, KY 42501
PD 1602 71
Danny M. Clark
401 Bogle St.
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OBG 3441 62
Randall Clark
401 Bogle St.
Somerset, KY 42501
U 4106 70
James D. Crase
340 Bogle St.
Somerset, KY 42501
FP 1602 62
Hossein Fallazadeh
340 Bogle St.
Somerset, KY 42501
SU 5088 69
Charles Raymond Faulkner
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Somerset, KY 42501
GP 1602 38
Veryl F. Frye, Jr.
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SU 1602 62
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OBG 1602 71
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R 1612 65
John N. Harrison
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Somerset, KY 42501
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Somerset, KY 42501
SU 1602 41
Stephen T. Jasper
340 Bogle St.
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FP 1602 67
Alberto M. Jayme
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Somerset, KY 42501
GP 5088 61
Stephen B. Kelley
340 Bogle St.
Somerset, KY 42501
FP 3440 62
Harry R. Kennedy, Jr.
340 Bogle St.
Somerset, KY 42501
IM 1602 75
Stephen S. Kiteck
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FP 1612 75
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Somerset, KY 42501
ORS 5088 68
Dennis Lane
ORS 1320 67
William O. Massey
E. French St.
Burnside, KY 42519
GP 1602 58
E. Truman Mays
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IM 5088 70
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PD 4106 60
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SU 3441 41
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GP 4106 42

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ORS 1612 64
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FP 2403 72
James C. Cantrill
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FP 4501 50
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FP 5088 65
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SU 5088 53
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FP 1602 76
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SHELBY

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IM 1701 75
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SU 1602 46
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SU 1602 70
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PH 3406 66
Eugene S. Carter
RFD #1
Versailles, KY 40383
IM 4501 40
Angela L. Clifford
360 Amsden Ave.
Versailles, KY 40383
SU 1612 74
Norman S. Fisher
Box 277
Midway, KY 40347
FP 1602 58
William J. Graul
200 Frankfort St.
Versailles, KY 40383
FP 1602 61
Charles N. Hall
Box 27 200 Frankfort St.
Versailles, KY 40383
GP 1602 41
Francis Milton Massie
Taylor Manor Berry Ave.
Versailles, KY 40383
SU
Olson Parrott
229 No. Main St.
Versailles, KY 40383
GP 1602 25
George C. Reed
130 E. Green St.
Versailles, KY 40383
FP 2101 41
Benjamin F. Roach
Box 277
Midway, KY 40347
FP 3207 43
Fikret T. Yalkut
229 No. Main
Versailles, KY 40383
U 5088 48

WOLFE

George E. Burnette
Medical Center
Campton, KY 41301
FP 1602 78
Paul F. Maddox
P.O. Box 127
Campton, KY 41301
FP 1602 52

WAYNE

Robert B. Breeding
302 No. Main St.
Monticello, KY 42633
GP 801 51
Frank Lewis Duncan
108 Main St.
Monticello, KY 42633
GP 1602 36
William Robert Kelsay
Box 335
Monticello, KY 42633
PH 1602 39
Ronald M. McFarland
Town and Country Plaza
Monticello, KY 42633
GP 75
Claude L. McHargue
RR 5 Box 186
Monticello, KY 42633
GP 1602 52
J. A. Patel
215 Columbia Ave.
Monticello, KY 42633
FP 5088 66
James K. Phillips, Jr.
Town and Country Plaza
Monticello, KY 42633
GP 74
Gerald R. Pratt
RR #5 Box 123
Monticello, KY 42633
GP 74
Mack Roberts
Michigan Ave.
Monticello, KY 42633
GP 1602 32
William Selvidge
Town and Country Plaza
Monticello, KY 42633
PD 75
John Woodrow Simmons
215 Columbia
Monticello, KY 42633
GP 1602 47

WARREN

Thomas H. Baird
#4 Doctors Bldg.
Bowling Green, KY 42101
GP 1602 58
Walter F. Beckett
418 State St.
Bowling Green, KY 42101
GP 4107 28
William G. Begley
1030 Newman Dr.
Bowling Green, KY 42101
OTO 1602 61
John S. Black
P.O. Box 370
Bowling Green, KY 42101
ANES 2402 73
John P. Blackburn
1326 Andrea St.
Bowling Green, KY 42101
TS 4105 58
Carroll C. Brooks
1791 Ashley Circle
Bowling Green, KY 42101
GP 1602 58
Frank L. Buono
1777 Ashley Circle
Bowling Green, KY 42101
ORS 3709 62
William O. Carson
919 Coventry Ct.
Bowling Green, KY 42101
ORS 1005 34
Robert T. Crosby
1403 Andrea St.
Bowling Green, KY 42101
OPH 1705 65
Carl Dobson
1312 Western Ave.
Bowling Green, KY 42101
OBG 0102 69
Andrew Donelson, Jr.
1109 State St.
Bowling Green, KY 42101
OBG 4106 68
John E. Downing
1403 Andrea St.
Bowling Green, KY 42101
OPH 1602 62
Vaughn L. Fisher
730 Fairview Ave.
Bowling Green, KY 42101
ORS 4106 54
John O. Fitts
1109 State St.
Bowling Green, KY 42101
IM 4105 70
Jesse T. Funk
810 Wakefield
Bowling Green, KY 42101
SU 4105 37
James T. Gilbert
1109 State St.
Bowling Green, KY 42101
IM 4105 34
J. Roger Goodwin
944 Fairview Ave.
Bowling Green, KY 42101
U 1602 66
Robert A. Goodwin
1777 Ashley Circle
Bowling Green, KY 42101
ORS 1211 64
Richard O. Green
522 E. Main St.
Bowling Green, KY 42101
GP 4105 29
Lawrence P. Green, Jr.
1326 Andrea Dr.
Bowling Green, KY 42101
P 3101 58
Richard F. Grise
1221 Ashley Circle
Bowling Green, KY 42101
SU 4105 44

WARREN—WASHINGTON—WHITLEY

Tom E. Hall
Warren County Hosp.
Bowling Green, KY 42101
R 1602 56
Henry S. Harris
944 Fairview Ave.
Bowling Green, KY 42101
U 4105 40
Ronald L. Hatcher
1312 Western Ave.
Bowling Green, KY 42101
OBG 1005 67
Hsing Y. Hsieh
1402 Andrea Dr.
Bowling Green, KY 42101
GP 5088 61
Harold Keen
1227 Ashley Circle
Bowling Green, KY 42101
IM 4106 44
William J. Kernohan
31 By-Pass
Bowling Green, KY 42101
P 5088 50
Jerry W. Martin
1167 31 W Bypass
Bowling Green, KY 42101
FP 1602 63
Frank H. Moore
1109 State St.
Bowling Green, KY 42101
IM 1701 41
William T. Moore
P.O. Box 370
Bowling Green, KY 42101
OTO 1602 62
Robert C. Newberry
Medical Ctr.-Box 56
Bowling Green, KY 42101
PATH 3501 69
Lynn Olson
730 Fairview
Bowling Green, KY 42101
ORS 73
Paul J. Parks
1109 State St.
Bowling Green, KY 42101
IM 1602 48
Marcus Patton
1801 Ashley Circle
Bowling Green, KY 42101
ANES 1602 69
Manuel R. Perez
1109 State St.
Bowling Green, KY 42101
U 5088 59
Harold D. Rosdeutscher
P.O. Box 56
Bowling Green, KY 42101
R 1612 66
Nelson B. Rue
1109 State St.
Bowling Green, KY 42101
SU 1602 56
William B. Russell
1109 State St.
Bowling Green, KY 42101
IM 2101 58
Carl E. Rutledge
Warren County Hosp.
Bowling Green, KY 42101
PATH 1602 55
Marilyn T. Rutledge
1914 Bybee St.
Bowling Green, KY 42101
GP 1602 64
L. Jack Scott
P.O. Box 370
Bowling Green, KY 42101
ANES 1602 60
Samuel A. Smith
1012 Drakesboro Dr. Rt. 2
Bowling Green, KY 42101
PATH 1602 73
Ronald H. Thompson
1312 Western Ave.
Bowling Green, KY 42101
OBG 1602 75
Lawrence O. Toomey
822 Covington
Bowling Green, KY 42101
IM 1602 30
Phillip W. Turner
Gen. Motors Assem. Plant
Bowling Green, KY 42101
OM 4106 75
Terry W. Tyler
739 Newman Dr.
Bowling Green, KY 42101
R 1612 73
Walter Warren
730 Fairview Ave.
Bowling Green, KY 42101
P 0903 72
John A. Wennerbom
1713 Rollingwood Way
Bowling Green, KY 42101
PATH 62
Harold F. West
WKU-Student Health Serv.
Bowling Green, KY 42101
FP 3713 48
Richard Wiesemann
Rt. #3 Crestlake Way
Bowling Green, KY 42101
R 1612 73
James O. Willoughby
727 Laurel Ave.
Bowling Green, KY 42101
OPH 1602 47
Luther M. Wilson
1791 Ashley Circle
Bowling Green, KY 42101
GP 1602 46
Howard V. Zeigel
Western KY University
Bowling Green, KY 42101
GP 4106 44

WASHINGTON

Richard A. Hamilton
219 W. Main St.
Springfield, KY 40069
FP 1602 39
Charles D. Howard
104 Covington Ave.
Springfield, KY 40069
GP 1602 61
Suk K. Koh
203 Walnut St.
Springfield, KY 40069
SU 5088 57
Dixie E. Snider
310 Walnut St.
Springfield, KY 40069
FP 1602 40

WHITLEY

Glen R. Baker, Jr.
205 S. Kentucky Ave.
Corbin, KY 40701
PUD 1602 68
Donald C. Barton
Doctors Park
Corbin, KY 40701
FP 1602 60
P. Bruce Barton
Doctors Park
Corbin, KY 40701
FP 1602 66
C. William Briscoe
Doctors Park
Corbin, KY 40701
P 2403 66
Willard M. Buttermore
107 So. Kentucky Ave.
Corbin, KY 40701
OPH 4106 39
Frank H. Catron
1705 Forrest Dr.
Corbin, KY 40701
OBG 1602 60
Robert Dane
American Greeting Card Rd.
Corbin, KY 40701
P 1403 53
William T. Daniel
Box 318 RR 2
Corbin, KY 40701
R 1602 54
James D. Dawson, Jr.
1708 Forest Dr.
Corbin, KY 40701
OBG 1612 77
William Stuart Eads
P.O. Box 669
Corbin, KY 40701
OPTH
William D. Hacker
Doctor's Park
Corbin, KY 40701
PD 1612 72
Ross A. Halbleib
Doctors Park
Corbin, KY 40701
PD 1612 75
Harry A. Hamilton
Doctor's Park
Corbin, KY 40701
SU 1602 56
Manoocheh Jorjani
501 So. Main St.
Corbin, KY 40701
SU 5088 55
Leslie E. Karr
Doctor's Park
Corbin, KY 40701
FP 1602 66
Jean M. MacKay
501 So. Main
Corbin, KY 40701
IM 5088 52
Bernard C. Moses
Jackson Mall Office
Williamsburg, KY 40769
FP 1612 76
Raymond A. Ohler
205 So. Kentucky St.
Corbin, KY 40701
GP 1602 39
Richard F. Park
1708 Forrest Dr.
Corbin, KY 40701
FP 1612 68
Jagdish S. Patil
Doctor's Park
Corbin, KY 40701
U 5088 61
Usha J. Patil
107 Mitchell St.
Corbin, KY 40701
PATH 5088 67
Roemer D. Pitman
402 Cumberland Ave.
Williamsburg, KY 40769
FP 4106 55
Elmer G. Prewitt
Doctor's Park
Corbin, KY 40701
FP 1602 55
Arun B. Rindani
H1 Doctors Park
Corbin, KY 40701
ORS 5088 55
Billy E. Sanderlin
Doctors Park
Corbin, KY 40701
OBG 4106 53
Gene W. Scott
210 So. Second St.
Williamsburg, KY 40769
FP 4106 62
Tae-Joon Seo
Rt. 4 Box 82-E
Corbin, KY 40701
R 5088 64
Keith P. Smith
206 So. Kentucky
Corbin, KY 40701
OBG 1602 36
Bobby Turner
1007 18th St.
Corbin, KY 40701
Carmel Wallace, Jr.
373 Bold Ruler Trail
Corbin, KY 40701
PD 1612 75
Roderick F. Weisert
Doctors Park
Corbin, KY 40701
SU 1612 75
Billy H. Wells
206 So. Kentucky St.
Corbin, KY 40701
FP 1602 62

Key to COUNTY CODES

AD	ADAIR
AL	ALLEN
AN	ANDERSON
BAL	BALLARD
BAR	BARREN
BAT	BATH
BE	BELL
BOO	BOONE
BOU	BOURBON
BD	BOYD
BRA	BRACKEN
BL	BOYLE
BRT	BREATHITT
BRK	BRECKINRIDGE
BUL	BULLITT
BUT	BUTLER
CLD	CALDWELL (see: Pennyrile)
CAL	CALLOWAY
C-K	CAMPBELL (see: Campbell-Kenton)
C-K	CAMPBELL-KENTON
CRL	CARLISLE
CAR	CARROLL
CTR	CARTER
CSY	CASEY
CHR	CHRISTIAN (see: Pennyrile)
CLK	CLARK
CLA	CLAY
CLN	CLINTON
CR	CRITTENDEN
CU	CUMBERLAND
D	DAVIESS
ED	EDMONSON
EL	ELLIOTT
ES	ESTILL
F	FAYETTE
FLM	FLEMING
FLO	FLOYD
FR	FRANKLIN
FU	FULTON
GAR	GARRARD
GAL	GALLATIN
GRT	GRANT
GRV	GRAVES
GRY	GRAYSON
GRN	GREEN
GRP	GREENUP
HAN	HANCOCK
HRD	HARDIN
HRL	HARLAN
HRS	HARRISON
HRT	HART
HND	HENDERSON
HNR	HENRY
HIC	HICKMAN
HO	HOPKINS
JA	JACKSON
J	JEFFERSON
JES	JESSAMINE
JNS	JOHNSON
C-K	KENTON (see: Campbell-Kenton)
KT	KNOTT
KX	KNOX
LRU	LARUE
LRL	LAUREL
LA	LAWRENCE
LE	LEE
LES	LESLIE
LET	LETCHER
LEW	LEWIS
LIN	LINCOLN
LIV	LIVINGSTON
LO	LOGAN
LY	LYON
MCRA	MC CRACKEN
MCRE	MC CREARY
MCL	MC LEAN
MAD	MADISON
MAG	MAGOFFIN
MRN	MARION
MRL	MARSHALL
MRT	MARTIN
MAS	MASON
MED	MEADE
MEN	MENIFEE
MER	MERCER
MET	METCALFE
MNR	MONROE
MNT	MONTGOMERY
MOR	MORGAN
MU	MUHLENBERG
NL	NELSON
NC	NICHOLAS
OH	OHIO
OL	OLDHAM
OWN	OWEN
OWS	*OWSLEY
PND	PENDLETON
PEN	PENNYRILE
PER	PERRY
PK	PIKE
PO	POWELL
PUL	PULASKI
ROB	*ROBERTSON
ROC	ROCKCASTLE
ROW	ROWAN
RU	RUSSELL
SCT	SCOTT
SH	SHELBY
SMP	SIMPSON
SP	SPENCER
TA	TAYLOR
TO	TODD (see: Pennyrile)
TRG	TRIGG (see: Pennyrile)
TRM	TRIMBLE
U	UNION
WRN	WARREN
WSH	WASHINGTON
WN	WAYNE
WB	WEBSTER
WT	WHITLEY
WF	WOLFE
WD	WOODFORD

*Code with Number of County submitting Membership. If no County listed Code 000-Members at Large.

ALPHABETICAL LIST OF KMA MEMBERS

A

Aaron, Oris—**AD**
Aaron, William Stephen—**J**
Abang, Raul S.—**HRD**
Abell, Irvin—**J**
Abell, Jr., Harry D.—**MCRA**
Abrams, Berel L.—**J**
Abshier, W. Mark—**D**
Ackerly, Spafford—**J**
Ackerman, Kurt—**J**
Acland, Robert D.—**J**
Acosta, Corazon B.—**KX**
Acosta, Roselio A.—**KX**
Adair, Norman—**GRT**
Adamkin, David H.—**J**
Adams, Billy M.—**J**
Adams, Brenton S.—**J**
Adams, Cyrus E.—**J**
Adams, Garrett—**J**
Adams, James D.—**FLO**
Adams, James E.—**MCRA**
Adams, Kearney R.—**CSY**
Adams, Lundy—**LET**
Adams, Samuel M.—**LRL**
Adams, Theodore L.—**F**
Adams, W. Lloyd—**F**
Adams, Jr., William E.—**MCRA**
Adan, Jose R.—**CHR**
Adkins, Brown L.—**EL**
Adkins, Hugh P.—**J**
Agrawal, Mahesh—**J**
Ahmad, Fazal H.—**HRL**
Ahmad, Waheed—**J**
Ahmadi, Bijan—**J**
Ahnquest, Gary R.—**BL**
Ainsworth, Sr., George E.—**HO**
Air, Clements W.—**K**
Air, Gordon W.—**K**
Akaydin, Mehmet S.—**F**
Akers, Robert H.—**J**
Akers, Roger D.—**FLO**
Akhtar, Syed Hasan—**FLO**
Al-Shami, Nadir—**J**
Alberhasky, Robert J.—**J**
Albritton, James E.—**GRV**
Alexander, Alex J.—**WD**
Alexander, Robert N.—**BE**
Alexander, Wallace R.—**HO**
Alfano, Frank M.—**J**
Algren, John T.—**J**
Allegra, Joseph C.—**J**
Allen, Billy R.—**OH**
Allen, Claude L.—**FLO**
Allen, David T.—**WD**
Allen, Faye G.—**K**
Allen, George S.—**J**
Allen, J. Kenneth—**J**
Allen, James R.—**HRS**
Allen, John D.—**J**
Allen, John M.—**F**
Allen, John R.—**F**
Allen, L. Chase—**F**
Allen, Richard D.—**J**
Allen, William C.—**F**
Allen, William R.—**MAD**
Allen, Jr., Charles E.—**J**
Alley, Rufus C.—**F**
Allnut, Charles F.—**K**
Allnutt, Richard A.—**K**
Almario, Joselito S.—**K**
Alonso, Andres—**F**
Alonso, Raoul O.—**J**
Alonzo, Ruby C.—**LET**
Alt, Daniel B.—**J**
Althaus, Jr., Arthur H.—**J**
Altman, Harry E.—**PK**
Alvarado, Esperanza—**J**
Alvarez, Beda P.—**K**
Alvey, Douglas R.—**SMP**
Alvey, James E.—**J**
Ambach, John W.—**J**
Amin, Mohammad—**J**
Amin, Rajanbhai R.—**J**
Amorocho, Jose M.—**CAR**
Amos, B. Kirtley—**CLD**
Anama, Emmanual—**CLA**
Anderson, Carl A.—**C**
Anderson, James W.—**F**
Anderson, Jerry E.—**F**
Anderson, Werner W.—**C**
Anderson, William H.—**J**
Andrews, Billy F.—**J**
Ansel, James R.—**TA**
Angelucci, Ralph J.—**F**
Anneken, Jr., Howard A.—**K**
Ante, Jose P.—**J**
Anvari, Taha S.—**J**
Anzures, Cecilia M.—**J**
Anzures, Humildad T.—**F**
Apesos, James—**F**

App, Frank E.—**J**
Archer, Raleigh R.—**F**
Arena, Paul J.—**J**
Arguedas, Armando—**J**
Arik, Mehet—**J**
Armbruster, William H.—**J**
Armitage, James L.—**K**
Armstrong, Lyman G—**J**
Armstrong, Paul S.—**HRD**
Arnett, Charles F.—**FLO**
Arnett, Donald—**J**
Arnett, John W.—**J**
Arnn, Edward T.—**J**
Arnold, Marion E.—**HO**
Arnold, Richard W.—**HRS**
Arnold, Robert E.—**J**
Arora, Krishan K.—**J**
Arriola, Ermelinda—**JNS**
Arrowood, Julia G.—**HRL**
Arroz, Vincent C.—**LET**
Arvin, Orson L.—**ROC**
Ash, Warren H.—**J**
Ashbrook, William J.—**J**
Asher, Bennett N.—**CLK**
Asher, Christine A.—**HO**
Ashworth, John S.—**BD**
Asriel, Erwin—**BOU**
Asuncion, Juan S.—**HRD**
Atasoy, Erdogan J.—
Atherton, C. Victor—**J.**
Atherton, L. Douglas—**J**
Attum, Abdulla—**J**
Aud, Richard E.—**J**
Auerbach, Robert E.—**FR**
Auerbach, S. Pearson—**J**
Austin, III, F. D.—**MCRA**
Avenido, Antero J.—**HRD**
Avila-Orlandi, Jose A.—**F**
Ayub, Asif—**HRL**
Azzam, Roshi A.—**J**

B

Babey, III, Joseph C.—**J**
Bachman, Richard K.—**HO**
Bada, Henrietta—**J**
Badenhausen, Walter E.—**J**
Badrudduja, Syed G.—**FLO**
Bae, Jae-Keun—**C**
Baehler, Richard W.—**F**
Bailen, James L.—**J**
Bailey, Herald K.—**BD**
Bailey, Rogers Q.—**BL**
Bailey, III, William C.—**MAS**
Bain, Robert S.—**F**
Baird, Glenn D.—**BAL**
Baird, Glenn F.—**BOO**
Baird, John M.—**BL**
Baird, Thomas H.—**WRN**
Baker, Charles G.—**J**
Baker, James G.—**J**
Baker, James W.—**F**
Baker, Richard W.—**J**
Baker, Robert F.—**J**
Baker, Simeon S.—**J**
Baker, Thomas H.—**FR**
Baker, William H.—**J**
Baker, William T.—**J**
Baker, Jr., Glen R.—**WT**
Bakus, Karen S.—**J**
Baldwin, John B.—**F**
Ball, Christina F.—**J**
Ball, Coy E.—**D**
Ballard, Joseph A.—**F**
Ballard, Ralph T.—**MER**
Ballard, Ted D.—**F**
Baluyot, Agustina A.—**K**
Banchongmanie, Ronachai—**J**
Banerjee, Timir—**J**
Banis, Jr., Joseph C.—**J**
Banks, William V.—**K**
Barbie, Ronald N.—**J**
Bard, James W.—**F**
Barham, Gary D.—**J**
Bark, Joseph P.—**F**
Barker, Denzil G.—**KT**
Barker, Ernest G.—**ROW**
Barker, Gary L.—**BD**
Barlow, Charles A.—**CHR**
Barlow, Fred D.—**J**
Barlow, Ronald G.—**MCRA**
Barnard, W. Winston—**MCRA**
Barnes, Ernest A.—**CLN**
Barnes, James R.—**J**
Barnett, Fred—**HND**
Barr, George W.—**LRL**
Barr, Jr., James M.—**FR**
Barrett, David L.—**CAL**
Barron, Bernard W.—**J**
Barron, Michael P.—**MAD**
Barrows, George H.—**J**
Barton, Donald C.—**WT**
Barton, P. Bruce—**WT**
Basha, Nabil—**FLO**
Bass, Norman H.—**F**
Bassi, Joseph A.—**MCRA**
Bate, John T.—**J**
Bateman, Robert C.—**BL**
Bates, John C.—**HRD**
Bates, Rodney K.—**LIN**
Battah, Emmanuel J.—**CHR**
Bauer, George W.—**HRD**
Bauer, Harry C.—**HRL**
Bauer, James L.—**ROW**
Baughman, Branham B.—**FR**
Baughman, III, John S.—**MER**
Baumgarten, James A.—**D**
Baute, Bernard J.—**MRN**
Bautista, Constancio M.—**J**
Bautista, Fe Leano—**J**
Bean, J. S.—**HRD**
Bean, James R.—**F**
Bean, Robert J.—**J**
Beanblossom, Robert L.—**J**
Beard, George S.—**MU**
Beard, Marion F.—**J**
Beasley, Lillard F.—**SMP**
Beatty, C. Patrick—**F**
Beatty, Oren A.—**J**
Bechmann, William J.—**BOO**
Bechtold, William—**HRL**
Beck, James L.—**HO**
Becker, Michael D.—**J**
Beckett, Walter F.—**WRN**
Beckmeyer, Jr., Wm. J.—**C**
Becknell, James L.—**CLA**
Becknell, William E.—**CLA**
Becknell, Jr., Wm. E.—**CLA**
Begley, Philip J.—**HRL**
Begley, William G.—**WRN**
Behaine, Jorge—**J**
Beilman, Henry J.—**J**
Beilman, Kenneth M.—**J**
Beineke, Daniel D.—**MAS**
Belhasen, Franklen K.—**JNS**
Belin, Robert P.—**F**
Belker, Arnold M.—**J**
Bell, Edward E.—**J**
Bell, Jesse B.—**J**
Bell, John P.—**J**
Bell, Richard M.—**F**
Bell, Jr., Henry R.—**TO**
Bellamy, George R.—**MOR**
Bennett, Durrett C.—**OH**
Bennett, James B.—**J**
Bennett, Shelley E.—**ROW**
Bennett, W. Neal—**J**
Bensman, Irvin—**D**
Bentley, Can M.—**PK**
Bergman, S. Eric—**J**
Bergner, Robert P.—**J**
Bergsma, Donald R.—**F**
Berman, Gerald—**J**
Berman, Henry I.—**J**
Berman, Robert S.—**BOU**
Bernard, Joe D.—**F**
Bernhard, C. Melvin—**J**
Bersot, Jr., James L.—**J**
Bertolone, Jr., S. J. —**J**
Betts, Gordon D.—**PUL**
Bever, John D.—**C**
Bhatt, Omkar N.—**ED**
Biagtan, Adelina C.—**J**
Bickel, John E.—**D**
Bieber, Herbert F.—**K**
Bierly, Jr., George R.—**J**
Biggs, Jr., James R.—**PUL**
Billington, Charles B.—**MCRA**
Bilotta, Joseph T.—**J**
Binegar, Garry N.—**D**
Binford, R. Bailey—**CAL**
Bingcang, Benigno P.—**F**
Bingham, Roy E.—**J**
Bippert, Curtis E.—**MCRA**
Birenbaum, Georges—**F**
Birkhead, Ben M.—**J**
Birlew,* Nicholas—**AD**
Bishop, Alexius M.—**K**
Bishop, John A.—**J**
Bishop, Marvin E.—**CLK**
Bisig, Charles J.—**J**
Bivins, Brack A.—**F**
Bizot, Byron—**J**
Bizot, David H.—**J**
Bizot, William H.—**J**
Black, John S.—**WRN**
Black, Sam H.—**J**
Black, Jr., Lowell J.—**PK**
Blackburn, Dwight L.—**MAD**
Blackburn, John P.—**WRN**
Blackburn, Winfrey P.—**FR**
Blackburn, Jr., Glenn K.—**PUL**
Blackburn, Jr., William E.—**F**
Blackstone, Jack C.—**D**
Blackstone, Jr., Jack C.—**D**
Blair, Earl—**J**
Blair, Murvel C.—**FR**
Blair, Robert A.—**FR**
Blake, Robert M.—**MAS**
Blakely, Gail E.—**ROW**
Blakey, Leslie W.—**F**
Blalock, William N.—**MCRA**
Bland, Charles L.—**GRY**
Bland, Jack D.—**HND**
Bland, James G.—**J**
Bland, Kirby I.—**J**
Bland, Vivian H.—**HRD**
Blandford, Charles Henry—**J**
Blandford, Jr., Joseph M.—**J**
Blanford, Arthur T.—**J**
Blankenship, Charles F.—**J**
Blanton, Chester M.—**MCRA**
Blaydes, M. Cary—**F**
Blevins, Harold W.—**J**
Blevins, Joseph W.—**J**
Blevins, Phillip K.—**F**
Bloch, Charles L.—**J**
Bloch, W. Austin—**J**
Block, J. Bradford—**J**
Blodgett, William A.—**J**
Bloom, Gerald E.—**J**
Bloss, Bryant—**J**
Blount, Rankin C.—**F**
Blumenreich, Martin S.—**J**
Boarman, Christopher A.—**F**
Bobys, Stephen M.—**F**
Boeckmann, George B.—**HRT**
Boeh, Daniel H.—**C**
Boerner, Arthur R.—**J**
Boggess, Joseph R.—**MU**
Boggs, Eli C.—**PER**
Boggs, James G.—**GRP**
Bongiorno, Felix J.—**F**
Boom, Jr., Paul—**MCRA**
Boone, William F.—**J**
Booth, Herbert R.—**BOO**
Booth, Thomas E.—**J**
Boram, Lawrence H.—**J**
Bordador, Teodoro—**J**
Borkar, Bhagwant—**J**
Bornstein, Alan M.—**J**
Borodofsky, Jr., T.—**MCRA**
Borsch, Warren W.—**J**
Bose, Sajal K.—**J**
Boso, John E.—**F**
Bosomworth, Peter P.—**F**
Boswell, Walter L.—**F**
Bosworth, N. Lewis—**F**
Bottiggi, James A.—**F**
Bowden, Jr., Mark—**F**
Bowen, Joseph Andrew—**J**
Bowen, R. Stephen—**BUL**
Bowers, Frank R.—**F**
Bowers, William E.—**HRL**
Bowers, Jr., C. Richard—**F**
Bowers, Jr., Marvin A.—**J**
Bowles, James M.—**HO**
Bowling, Edward C.—**MRN**
Bowling, Joseph R.—**J**
Bowling, Maurice—**OWN**
Bowling, R. Eugene—**MAD**
Boyea, Lyle H.—**J**
Brabon, David L.—**F**
Bradbury, John William—**LRU**
Bradford, Benjamin F.—**MCRA**
Bradley, Herbert C.—**J**
Bradnan, William A.—**J**
Bradshaw, Harold W.—**J**
Brady, Burns M.—**J**
Braen, G. Richard—**F**
Brandstetter, Thomas R.—**LIV**
Brashear, James S.—**MU**
Brashear, Robert F.—**CLK**
Brassfield, Clyde M.—**HRD**
Brassine, William F.—**HRD**
Braun, Joseph G.—**C**
Bravo, Joseph J.—**K**
Bravo, Leticia A.—**BAR**
Bravo, Orlando F.—**BAR**
Bray, Gary T.—**F**
Breeding, Robert B.—**WN**
Brennan, III, James M.—**FR**
Brenner, Susan J.—**FLO**
Brewer, James H.—**BUL**
Brewer, John R.—**HO**
Brewer, McHenry S.—**J**
Brewer, Walter R.—**F**
Brice, Charles T.—**J**
Brigance, William H.—**MCRA**
Brill, Joseph B.—**J**
Brindley, Milton L.—**BRA**
Briones, Fe Nuesa—**J**
Briones, Voltaire C.—**J**
Briscoe, C. William—**WT**
Brizel, Herbert E.—**J**
Brock, Lawrence O.—**TO**
Brockman, Edward J.—**J**
Brockman, George F.—**MU**
Broderson, John P.—**FR**
Brodsky, Stuart L.—**GRV**
Brogan, John W.—**K**
Brohm, Charles M.—**J**
Bronner, Irvin E.—**J**
Brooks, Bobby J.—**TA**
Brooks, Carroll C.—**WRN**
Brooks, William H.—**F**
Broudy, Bruce C.—**F**
Brower, Thomas D.—**F**
Brown, Buster F.—**FR**
Brown, Charles M.—**NL**
Brown, Collins D.—**MCRA**
Brown, David E.—**J**
Brown, David L.—**F**
Brown, Marion G.—**F**
Brown, R. Kendall—**SCT**
Brown, Randall S.—**HND**
Brown, William H.—**BRK**
Brown, Jr., Manuel—**J**
Browne, Philip T.—**J**
Bruce, William M.—**MCRA**
Bruce, III, Charles O.—**J**
Bruce, Jr., Charles O.—**J**

Brueggemann, Carl J.—**K**
Brumberg, Barry A.—**J**
Bruning, Walter O.—**J**
Bryant, Charles G.—**J**
Bryant, Glenn W.—**J**
Bryant, J. Ray—**J**
Bryant, William H.—**BAR**
Bryant, Jr., Thomson R.—**F**
Bryson, Jerry M.—**HRL**
Bucayu, Nemesio—**J**
Buchanan, Jerry B.—**J**
Buchele, Earl S.—**BRK**
Buchino, John J.—**J**
Buckley, George F.—**PK**
Buller, Paul H.—**LET**
Bumgardner, J. Samuel—**J**
Bunch, Edwin L.—**F**
Bundy, Vernon—**J**
Bunnell, Thomas E.—**K**
Bunting, Dewey L.—**J**
Bunting, John L.—**J**
Buono, Frank L.—**WRN**
Burchell, Delanthony—**K**
Burchell, Jr., Eugene J.—**K**
Burchett, Troy L.—**ROW**
Burckardt, Robert J.—**J**
Burgess, Clyde A.—**BD**
Burgess, Jerald M.—**MCRE**
Burian, Frank J.—**PK**
Burke, Daniel W.—**J**
Burke, John H.—**F**
Burke, Thomas F.—**J**
Burke, Winston L.—**F**
Burkhart, Robert C.—**F**
Burkhart, Stephen—**LIV**
Burkhart, William K.—**F**
Burkhead, Naaman H.—**J**
Burnam, R. Rodes—**J**
Burnett, Jr., Clem F.—**GRV**
Burnette, George E.—**WF**
Burris, John C.—**MCRA**
Burrow, Woody G.—**MCRA**
Burton, Charlene G.—**J**
Burton, Jay Mike—**MNT**
Burton, Jeffrey K.—**J**
Buschemeyer, Jr., Wm. C.—**J**
Buschemeyer, Sr., Wm. C.—**J**
Bushart, Glenn F.—**FU**
Bushart, Robert W.—**FU**
Bushey, Harold L.—**KX**
Bushong, William D.—**D**
Bushong, William R.—**MNR**
Buten, Robert E.—**C**
Buttermore, Harry K.—**HRL**
Buttermore, Willard M.—**WT**
Butterworth, Jane R.—**J**
Bux, Madar—**BL**
Bux, Shakeela P.—**BL**
Bynum, Gus A.—**SCT**
Byrd, Robert D.—**D**
Byron, Robin A.—**BAT**

C

Cabaltica, Restituto M.—**JES**
Cabuay, Bienvenido A.—**BE**
Caffrey, P. Raphael—**F**
Caisley, Ian J.D.—**F**
Caldroney, Ralph D.—**F**
Caldwell, Harry G.—**BL**
Caldwell, Joseph—**F**
Caldwell, Jr., Charles E.—**BOO**
Calhoun, Neal—**CHR**
Calico, Forrest W.—**K**
Callahan, Edward L.—**J**
Callaway, Robert G.—**J**
Callen, Jeffrey P.—**J**
Callis, James H.—**D**
Camp, Bonnie R.—**J**
Campbell, Carey W.—**MCRA**
Campbell, Mark R.—**HO**
Campbell, Peter C.—**J**
Campbell, Thomas E.—**J**
Campbell, Jr., Aubrey G.—**TO**
Campomanes, Ildefonso A.—**J**
Canan, E. Dean—**J**
Canfield, Bourbon E.—**J**
Canlas, Noel D.—**HND**
Cantley, Donald A.—**HND**
Cantor, Howard L.—**J**
Cantrill, James C.—**SCT**
Caplinger, Carl B.—**CHR**
Capote, Rodolfo—**J**
Cardenas, Glenn D.—**MAS**
Carloss, Harry W.—**MCRA**
Carlson, Jr., John A.—**J**
Carney, William M.—**HRD**
Carnighan, Robert H.—**J**
Carr, Carter B.—**FR**
Carrasquer, Gasper—**J**
Carroll, Michael G.—**J**
Carson, William O.—**WRN**
Cartaya, Mario W.—**J**
Carter, Eugene S.—**WD**
Carter, George P.—**LA**
Carter, James E.—**MNR**
Carter, Lila H.—**J**
Carter, Tim Lee—**MNR**
Cartmell, William H.—**MAS**
Casey, J. Patrick—**HO**
Casey, John J.—**J**
Cash, Jr., Ralph L.—**CLD**
Cash, Sr., Ralph L.—**CLD**
Caso, William D.—**HRD**
Casper, Norvin L.—**J**
Casper, R. Burke—**J**
Cassady, Ballard W.—**PK**
Cassidy, John L.—**K**
Castillo, Julian V.—**HRS**
Castle, Eugene A.—**HO**
Catlett, Arvil G.—**HO**
Caton, John C.—**HND**
Catron, Frank H.—**WT**
Caudill, C. Louise—**ROW**
Caudill, Henry Boyd—**AN**
Caudill, W. Neville—**J**
Cave, Ray A.—**GRY**
Cawood, Charles David—**BE**
Cawood, Walter L.—**BD**
Cecil, Frederick J.—**NL**
Cecil, Samuel E.—**PO**
Cecil, Jr., John T.—**J**
Cecil, Jr., Joseph R.—**J**
Celletti, John K.—**J**
Chalkley, Judson E.—**F**
Chalothorn, Narong—**FLO**
Chambers, Henry F.—**TA**
Chambliss, Robert B.—**BRK**
Chan, Shiu-Kee—**PER**
Chandler, John D.—**MRL**
Chaney, George R.—**PER**
Chaney, Glenn S.—**MCRA**
Chaney, Herbert—**HO**
Chaney, Sally H.—**MCRA**
Chaplin, Mark S.—**HRD**
Chaplin, Jr., Edward R.—**J**
Charasika, James D.—**J**
Charette, Ray—**CAL**
Chase, Sheldon—**J**
Chatham, Donald—**SH**
Chaudhri, Nonihal S.—**J**
Chaudhry, Aftab A.—**J**
Cheatham, George C.—**GRN**
Cheatham, Jr., Wm. C.—**J**
Chen, Julia—**J**
Chenault, Harvey—**J**
Cheng, Samuel H.—**J**
Cherian, Ponnattu—**J**
Cherian, Saramma—**J**
Cheshire, Jr., John C.—**FR**
Chick, Ernest W.—**F**
Childers, James—**J**
Childers, Sara J.—**J**
Chin, Hong W.—**F**
Chipman, Lenore Patrick—**GRT**
Chism, Ronald G.—**J**
Chmiel, Stanley S.—**J**
Cholera, Vinoobhai M.—**C**
Christian, Elbert G.—**J**
Christopherson, Wm. M.—**J**
Chu, Ann Marie—**J**
Chu, Caleb H.—**CLA**
Chu, Priscilla K.—**CLA**
Chumley, Willard F.—**MCRA**
Chung, E. Pyo—**OH**
Church, Stephen H.—**J**
Churney, Alvin M.—**J**
Chutkow, Lee R.—**J**
Ciliberti, Angelo A.—**J**
Clanton, Jerry N.—**J**
Clapp, William H.—**HO**
Clardy, Delmas M.—**CHR**
Clark, Arch B.—**MAD**
Clark, Carl T.—**F**
Clark, Charles D.—**CAL**
Clark, Danny M.—**PUL**
Clark, Gerald—**HO**
Clark, Orville S.—**J**
Clark, Randall—**PUL**
Clark, Ritchie L.—**D**
Clarke, James A.—**HO**
Clarke, William F.—**F**
Claugus, Clarence E.—**J**
Clawson, D. Kay—**F**
Clay, John B.—**FR**
Clay, Jr., Herbert L.—**J**
Clear, Robert C.—**C**
Cleveland, Jr., C. H.—**SH**
Click, C. Glen—**LIN**
Clifford, Angela L.—**WD**
Cloys, Don E.—**MAD**
Coats, Thomas F.—**F**
Cody, Jack E.—**BL**
Coe, Walter S.—**J**
Coffman, Selby E.—**HO**
Coghe, David W.—**F**
Cohen, Burton J.—**J**
Cohen, Norman K.—**J**
Cohen, Stuart P.—**J**
Colbert, Morgan R.—**J**
Colburn, William J.—**MRL**
Colburn, William R.—**MRL**
Cole, John R.—**F**
Cole, Norman M.—**J**
Coleman, Davis Hunter—**MER**
Coleman, Everett S.—**MCL**
Coleman, Lee Alan—**J**
Coleman, Timothy L.—**F**
Colley, Richard L.—**GRV**
Collier, Henry S.—**J**
Collier, Norman G.—**J**
Collier, Ronald N.—**J**
Collings, Jack C.—**D**
Collins, Adrian N.—**GRP**
Collins, John W.—**F**
Collis, Stanley W.—**J**
Collis, William J.—**F**
Colvin, David S.—**HRD**
Combs, Arnold B.—**F.**
Combs, Ballard F.—**F**
Combs, Charles R.—**F**
Combs, Gene N.—**PK**
Combs, James L.—**K**
Combs, Lyndon F.—**PER**
Combs, Paul S.—**F**
Comer, J. William—**J**
Comer, Milton—**J**
Compton, David Alan—**HO**
Cona, Joseph P.—**J**
Conlan, James K.—**CHR**
Conley, Joe G.—**J**
Connelly, Edward W.—**BD**
Conner, Eugene H.—**J**
Conner, William T.—**BD**
Conners, Jerry W.—**C**
Connerth, James E.—**CHR**
Conway, Peter M.—**J**
Cook, Charles E.—**CAL**
Cook, Christine L.—**J**
Cook, Kenneth G.—**MCRA**
Cook, Larry N.—**J**
Cook, Todd M.—**C**
Cook, William B.—**FLO**
Cook, III, Clinton C.—**J**
Cooke, Samuel L.—**HRL**
Cooper, James K.—**F**
Cooper, John G.—**HRS**
Cooper, Robert G.—**J**
Cooper, Robert M.—**F**
Cooper, Samuel L.—**J**
Cooper, Sidney P.—**F**
Cooper, Wilford L.—**F**
Cooper, William L.—**F**
Cooper, Jr., Carl—**TRM**
Coordes, Kathleen M.—**F**
Cope, Jack W.—**HRL**
Copeland, G. Nelson—**F**
Copley, II, Robert W.—**J**
Coppedge, Ruth M.—**CHR**
Corales, Enedino R.—**F**
Corbitt, Phyllis J.—**JES**
Cordero, Jose M.—**MOR**
Cornett, Cathryn V.—**CSY**
Cornish, Allen L.—**F**
Cornish, III, Allen L.—**F**
Coronel, Abel J.—**J**
Coronel, Emmanuel R.—**J**
Corpus, R. P.—**HO**
Corum, Joanne D.—**BE**
Cosio, Julio Elio—**J**
Cost, Guinn S.—**CHR**
Costich, Timothy D.—**F**
Costigan, Daniel G.—**J**
Cotthoff, John E.—**CHR**
Counts, Edward F.—**F**
Courtenay, Thomas A.—**J**
Cowan, John L.—**J**
Cowan, Jr., Walter E.—**PER**
Cowen, David L.—**F**
Cowherd, Colby N.—**F**
Cowherd, Harry J.—**FR**
Cowles, Mary B.—**F**
Cowley, Claire E.—**J**
Cox, David M.—**J**
Cox, Frederick G.—**PK**
Cox, James B.—**CHR**
Cox, Randy—**D**
Cox, Robert D.—**J**
Cox, Warren M.—**J**
Cox, William H.—**BOU**
Coy, Fred E.—**J**
Coy, III, James T.—**MAD**
Coyer, Bruce H.—**F**
Crabbs, Jerry R.—**K**
Crabtree, Carson E.—**J**
Crabtree, Clovis A.—**J**
Crabtree, Garrett M.—**J**
Crabtree, Kenneth R.—**MNR**
Craft, T. Garrett—**HRL**
Craig, Cedric—**LET**
Crary, Paul D.—**C**
Crase, Charles E.—**LIN**
Crase, James D.—**PUL**
Crawford, Ben W.—**F**
Crawford, E. Philip—**F**
Crawford, Frank B.—**MCRA**
Crawford, Kenneth P.—**J**
Craycraft, Larry B.—**BD**
Creech, Jr., John L.—**J**
Creevy, Joseph A.—**K**
Cressman, Jr., Fred K.—**J**
Crews, James P.—**BAR**
Crisologo, Loreto L.—**HRL**
Crisostomo, Rufino F.—**KX**
Crocker, Max A.—**F**
Croft, Rachel G.—**CHR**
Cronen, Michael R.—**J**
Cronen, Jr., Paul W.—**J**
Cronin, John D.—**F**
Cropper, Wendy G.—**F**
Crosby, Robert T.—**WRN**
Crossen, Philip S.—**F**

Crouch, Richard H.—**CAL**
Crowder, II, Bennett L.—**CHR**
Crutcher, Richard R.—**F**
Culbertson, Jr., Wm. H.—**MCRA**
Cull, Leighton L.—**FR**
Cull, D. Abbett—**OWN**
Cullen, Donal S.—**K**
Cullen, John W.—**F**
Culley, Gregory A.—**J**
Cummings, Norman A.—**J**
Cummings, Patrick W.—**J**
Cummings, III, Edward C.—**J**
Cummins, Dewey E.—**BRA**
Cummins, Jr., C. E.—**MAS**
Cundiff, Jr., James R.—**BUL**
Cunningham, Guy C.—**BD**
Cunningham, Melvin D.—**F**
Curd, Philip R.—**JA**
Curry, James W.—**J**
Cymbala, Bohdan—**HND**
Cyran, Stanley J.—**J**

D

Dade, James R.—**CHR**
Dageforde, David A.—**J**
Dahhan, Abdulkader—**HRL**
Dahlenburg, David R.—**F**
Dalton, W. Lisle—**F**
Dalzell, Jr., Robert C.—**D**
Dame, Richard W.—**J**
Damron, James R.—**F**
Dane, Robert—**WT**
Daniel, Fielding W.—**J**
Daniel, William T.—**WT**
Daniel, Jr., Kearney B.—**BL**
Daniels, Charles A.—**FR**
Daniels, Charles Bishop—**BD**
Daniels, William C.—**K**
Darnell, Matthew C.—**F**
Darpel, John A.—**K**
Datta, Robin—**J**
Daughdrille, John E.—**K**
Daugherty, Harry R.—**BOO**
Daugherty, Joseph F.—**BOO**
Daugherty, Michael E.—**F**
Daus, Arthur T.—**J**
Dave, Udaykant V.—**HO**
David, Alan K.—**F**
David, Douglas—**J**
Davidson, Chester L.—**J**
Davies, Theodore E.—**MCRA**
Davila, Luis E.—**C**
Davis, Charles K.—**MCRA**
Davis, Charles P.—**J**
Davis, Edwin R.—**CHR**
Davis, Edwin T.—**MCRA**
Davis, Gary Wade—**HO**
Davis, Harold Q.—**J**
Davis, Howell J.—**D**
Davis, James W.—**J**
Davis, Kent L.—**F**
Davis, Lawrence A.—**J**
Davis, Mary Long—**J**
Davis, Owen L.—**AL**
Davis, Robert—**HND**
Davis, Russell H.—**PK**
Davis, Terry Lee—**J**
Davis, William Burford—**J**
Davis, Jr., William E.—**BOU**
Davis, Jr., William G.—**J**
Dawoud, Samir—**HRL**
Dawson, John E.—**C**
Dawson, M. Allen—**F**
Dawson, Martha P.—**J**
Dawson, Royce E.—**D**
Dawson, Jr., James D.—**WT**
Day, Jr., Thomas G.—**J**
De Bandi, Harry O.—**HO**
De Carvalho, Roberto M.—**K**
Dean, James—**J**
Dean, Melvin L.—**F**
Dean, Wynant—**J**
Deaton, Joseph E.—**AL**
Dedman, Elizabeth B.—**J**
Dedman, Thomas C.—**J**
DeLong, Henry F.—**J**
Dempsey, Jerry E.—**C**
DeMunbrun, Donne O.—**J**
DeMunbrun, Truman W.—**J**
Denham, Harry C.—**MAS**
Denham, Mitchel B.—**MAS**
Denham, Ralph M.—**J**
Denison, Vinna Rhea—**HO**
Dennis, Elbert L.—**J**
Dent, Paul L.—**J**
Denton, Clarence E.—**J**
Denton, Sandra C.—**J**
Desai, Suvas G.—**MAD**
DeSimone, Kenneth J.—**GRN**
Devillez, David L.—**MCRA**
Dew, Joseph M.—**HRD**
DeWeese, Bob M.—**J**
Dhanjal, Surjeet S.—**J**
Diaz, Ronilo D.—**MU**
Dick, Marcus—**J**
Dickinson, John—**BAR**
Dickinson, Lewis—**BAR**
Dickinson, Lewis G.—**BAR**
Dickinson, Jr., Grady L.—**J**
Dickstein, Herbert—**J**
Dickstein, Leah J.—**J**
Diebold, Donald G.—**J**
Diebold, John C.—**J**
Dienes, James A.—**J**
Diles, Jack D.—**MCRA**
Dill, Daniel R.—**J**
Dillard, Francis J.—**GRV**
Dillon, Jr., Marcus L.—**F**
Dinno, Nuhad D.—**J**
DiOrio, Victor J.—**J**
Ditty, Jr., Jack F.—**BD**
Dixon, Jr., Clarence K.—**J**
Dobbs, Charles E.—**J**
Dobner, Joseph J.—**FR**
Dobson, Carl—**WRN**
Dochterman, Darryl L.—**F**
Dockery, Robert W.—**J**
Dodds, Charles R.—**HO**
Dodson, Carlisle V.—**LO**
Dodson, George E.—**HO**
Dodson, James C.—**LO**
Dominguez, Jr., P. R.—**HND**
Domstad, Peggy A.—**F**
Donaldson, Jr., Elvis S.—**F**
Donelson, Jr., Andrew—**WRN**
Donley, James M.—**HO**
Donnelly, John D.—**F**
Donnelly, Patricia J.—**J**
Donohue, Thomas A.—**F**
Donovan, Arthur J.—**J**
Donovan, George T.—**K**
Dorman, David W.—**J**
Dorroh, Glenn U.—**F**
Dorton, Jr., David H.—**J**
Doughty, Richard E.—**J**
Douglas, Craig H.—**J**
Douglas, David L.—**FR**
Douglas, James B.—**J**
Douglass, Jr., Marion A.—**LRU**
Dowdell, Richard W.—**J**
Dowden, C. William—**J**
Dowden, William L.—**F**
Downing, John E.—**WRN**
Doyle, George F.—**J**
Doyle, John H.—**J**
Dozier, George S.—**F**
Draime, Robert G.—**C**
Drake, Louis A.—**F**
Drake, Robert G.—**HO**
Drasin, George F.—**J**
Draus, John M.—**J**
Dreszer, Moises—**J**
Drye, David D.—**J**
Duany, Anthony Thomas—**J**
Dubick, Marc N.—**F**
Dubilier, Louis D.—**F**
Dubou, Richard H.—**J**
Dudney, Jerald S.—**FR**
Duff, W. Rexford—**BD**
Duncan, Charles H.—**J**
Duncan, Frank Lewis—**WN**
Dunkelberger, Dale E.—**JES**
Dunlany, Samuel C.—**D**
Duque, Fausto—**J**
Duran, Daniel A.—**J**
Durham, William C.—**J**
Duvall, Victor F.—**GRY**
Dyer, Robert S.—**J**
Dzenitis, Andrievs J.—**J**

E

Eads, William Stuart—**WT**
Eastham, Mary L.—**MNT**
Eastland, M. Wilson—**F**
Eastridge, Robert D.—**MRN**
Eberle, David A.—**CAL**
Eberson, Frederick—**F**
Eblen, Kenneth M.—**HND**
Echiverri, Alfredo V.—**BOU**
Eckerle, John E.—**J**
Eddison, Grace—**ROW**
Edds, Sidney P.—**MCRA**
Edelen, Owen B.—**J**
Edelstein, Stephen G.—**F**
Edger, Donald E.—**F**
Edgin, Howard L.—**BAR**
Edmundson, David P.—**MNT**
Edwards, Darwin—**J**
Egan, Thomas E.—**K**
Eggers, Ernest A.—**J**
Ehrie, Jr., Michael G.—**BD**
Ehsan, Mohsen—**J**
Eiferman, Richard A.—**J**
Eiseman, Walter R.—**K**
Elam, Sandra M.—**J**
Elbl, Francisco—**J**
Eldridge, John C.—**J**
Elicker, Edward R.—**K**
Ellingsen, Norman H.—**F**
Elliot, Howard L.—**HRL**
Elliott, Marvin M.—**J**
Elliott, Robert B.—**J**
Elliott, Jr., Barney E.—**D**
Ellis, Keith E.—**MRL**
Ellis, Robert E.—**J**
Ellis, Rudy J.—**J**
Ellis, William C.—**F**
Emberton, Lawrence P.—**MET**
Embry, James C.—**MCRA**
Embry, III, Kenneth E.—**J**
Emslie, Robert J.—**HO**
England, Gary T.—**MCRA**
Enright, Dennis W.—**J**
Epling, William D.—**MAD**
Escamilla, Antonio L.—**K**
Esham, Elwood—**LEW**
Eskind, Harold G.—**J**
Estanislao, Amado B.—**J**
Estill, George E.—**MAS**
Eubank, Rachel R.—**HRL**
Eubanks, Jr., Samuel G.—**J**
Evans, Carl T.—**F**
Evans, Donald L.—**J**
Evans, Evalyn G.—**BD**
Evans, James D.—**PK**
Evans, Meredith J.—**BE**
Evans, Orville T.—**F**
Eversole, Charles D.—**K**
Ewing, James A.—**TA**

F

Fadel, Ronald J.—**J**
Fagan, Linda S.—**MAD**
Fairchild, John—**FLO**
Fallazadeh, Hossein—**PUL**
Falls, Ronald E.—**J**
Fant, Robert D.—**BAR**
Farley, Claude H.—**F**
Farmer, John M.—**J**
Farmer, Kenneth M.—**J**
Farmer, Sidney E.—**ED**
Farnsley, Wesley G.—**J**
Farreill, Jr., Thomas J.—**HRD**
Farrell, Earl J.—**C**
Farrell, William F.—**D**
Faul, Clarice R.—**J**
Faulconer, Harold T.—**F**
Faulkner, Charles R.—**PUL**
Faulkner, Joseph S.—**C**
Faulkner, Roscoe—**LIV**
Faurest, Michael—**J**
Faurest, Jr., John O.—**J**
Feitelson, Philip J.—**J**
Fellows, Richard A.—**J**
Ferrell, James L.—**BOU**
Feuss, Jr., Charles—**K**
Feutz, Edward P.—**D**
Fidler, Robert W.—**FLM**
Fields, Robert D.—**GRV**
Fine, Lewis—**J**
Fink, Stuart A.—**J**
Fischer, Doane—**F**
Fischer, Karen F.—**J**
Fischer, Kerwin Armand—**J**
Fisher, Charles R.—**HO**
Fisher, James M.—**ROW**
Fisher, Norman S.—**WD**
Fisher, Vaughn L.—**WRN**
Fitts, John O.—**WRN**
Fitzgerald, Barbara A.—**J**
Fitzpatrick, James F.—**J**
Flanigan, Robert C.—**F**
Flautt, Jr., James Robert—**J**
Fleitz, Paul A.—**J**
Fliegelman, Maurice T.—**J**
Flint, Jr., Lewis M.—**J**
Florman, Larry D.—**J**
Flowers, Jeremiah T.—**J**
Flowers, Nancy C.—**J**
Flowers, Samuel H.—**BE**
Floyd, John B.—**F**
Floyd, Richard D.—**F**
Flynn, Michael B.—**J**
Ford, H. W.—**MRL**
Ford, Jerald M.—**BD**
Ford, Lowell E.—**K**
Ford, Norwood K.—**J**
Ford, Jr., James D.—**J**
Forde, Francis A.—**BE**
Fornaris, Fernando P.—**BAR**
Forrester, Alex M.—**J**
Forrester, James—**LET**
Fortune, Carl H.—**F**
Foshee, Clyde H.—**J**
Fossett, Ralph T.—**ROW**
Foster, George L.—**F**
Foster, Martha M.—**F**
Foster, Will S.—**J**
Fowler, Jeffrey P.—**J**
Fowler, Merle W.—**MCRA**
Fowler, Jr., Joseph F.—**J**
Fox, Gary—**J**
Fox, John M.—**F**
Fox, Leon—**J**
Fox, Mary P.—**PK**
Fragge, Ronald G.—**K**
Fraim, Jerry D.—**JNS**
Francis, Herbert B.—**BOO**
Francisco, Julieta B.—**K**
Franco, Sofia M.—**J**
Franks, Charles D.—**ROW**
Franks, Darrell—**J**
Franks, Larry C.—**MCRA**
Franz, C. Wayne—**BD**
Franz, Lyle C.—**MAS**
Franz, Mary V.—**J**
Frasher, E. Kenneth—**J**
Frazier, James W.—**CHR**
Frederick, James D.—**MOR**
Fredrick, George A.—**HRD**
Freedman, James R.—**F**

Freeman, James A.—**HO**
Freer, James A.—**J**
Freer, John H.—**F**
French, Samuel L.—**MCRA**
Frey, Walter D.—**F**
Frickman, Don H.—**C**
Friedeman, Elliott M.—**C**
Friedlieb, Oskar P.—**BD**
Friesen, Carl M.—**F**
Friesen, Jerold N.—**F**
Fritz, Samuel D.—**MAD**
Fruehwald, Edwin J.—**J**
Fry, Donald E.—**J**
Frye, Jr., Veryl F.—**PUL**
Fuchs, Gary L.—**J**
Fuenfer, Michael M.—**J**
Fuller, J. Luther—**J**
Fuller, Jr., Elzer T.—**MAD**
Fulmer, Adrian A.—**F**
Fulton, Robert L.—**HO**
Funk, Jesse T.—**WRN**
Funke, Harold F.—**OL**
Fuqua, Joseph T.—**CHR**
Fuqua, William R.—**D**
Furcolow, Michael L.—**F**
Furgason, Thomas G.—**D**

G

Gabbard, Mildred B.—**OWS**
Gabbert, William R.—**D**
Gaines, Scott—**HO**
Gaines, Jr., Frank M.—**J**
Gajadhar, David—**J**
Galla, Patrick P.—**J**
Gallo, Thomas A.—**HO**
Gamboa, Renee L.—**J**
Gamel, John W.—**J**
Ganem, John F.—**J**
Garamy, Jr., Frank—**K**
Garcia, Carmelo—**J**
Garcia, Daniel P.—**J**
Garcia, Lovegildo—**J**
Garcia, Michael S.—**GRP**
Garden, John W.—**F**
Gardner, Francis T.—**J**
Gardner, Hoyt D.—**J**
Gardner, Neven John—**F**
Gardner, Richard—**J**
Garner, John R.—**CHR**
Garon, Max L.—**J**
Garrastazu, Jorge—**CAL**
Garretson, Henry D.—**J**
Garrett, Morris M.—**K**
Garrison, Katherine P.—**J**
Garrison, Richard N.—**J**
Garst, Garland R.—**BAR**
Gataky, George J.—**J**
Gates, Dorothy G.—**MAD**
Gaurano, Rosalie M.—**MAG**
Gauri, Kamla—**J**
Gavin, Michael P.—**LIV**
Gay, James G.—**F**
Gaynor, Donal D.—**K**
Gearhart, Elmer A.—**D**
Gearhart, John P.—**J**
Gedmark, John I.—**J**
Gee, William F.—**F**
Geeslin, Lois F.—**J**
Geevarghese, Kunnathu P.—**J**
Gehring, Samuel W.—**FLM**
Gendell, Howard M.—**HO**
Geoghegan, Brian P.—**F**
George, Anthony—**J**
George, Donald I.—**F**
George, Eli J.—**MRN**
George, Salem M.—**MRN**
Gerald, III, Paul E.—**HRD**
Geren,* Jack W.—**F**
Gergen, John A.—**FR**
Germano, Jr., Roy P.—**J**
Gerson, Kenneth L.—**F**
Gettelfinger, Ralph A.—**J**
Gettelfinger, Wilfred C.—**J**
Ghali, Nabil N.—**C**
Ghazi, Cyrus—**J**
Ghazi, Darius—**J**
Giannini, Frank P.—**CLD**
Giannini, J. Thomas—**J**
Giannini, Jack Thomas—**CHR**
Gibbs, Jerry L.—**BAR**
Gibson, Elvin T.—**J**
Gibson,* Kermit D.—**PK**
Gibson, Ray A.—**BAR**
Gibson, Smith H.—**K**
Gibson, William L.—**HO**
Gierlach, Zygmunt S.—**F**
Giesel, Louis O.—**J**
Giglia, Jr., Anthony R.—**C**
Gilbert, George F.—**AN**
Gilbert, James T.—**WRN**
Gilbert, Jr., John F.—**PER**
Gilbert, Sr., Wendell N.—**D**
Gill, C. Richard—**F**
Gillespie, Harold R.—**MNT**
Gillespie, William H.—**J**
Gilley, Lowell D.—**HRL**
Gilliam, David T.—**K**
Gilliam, M. Randolph—**F**
Gillim, Douglas L.—**J**
Girardet, Roland E.—**J**
Givens, Gary D.—**MU**
Gladstein, Mark O.—**J**
Glaser, Nicholas W.—**J**
Glazer, Norman—**J**
Gleason, John R.—**J**
Glenn, John P.—**LO**
Glover, Michael W.—**BL**
Goddy, Leonard A.—**J**
Godfrey, William J.—**HRD**
Goebel, Ronald G.—**J**
Goldberg, Harry—**J**
Goldberg, John W.—**CAL**
Goldberg, Lawrence G.—**J**
Golde, Harry R.—**J**
Golden, Abner—**F**
Golden, James S.—**BE**
Golder, Sylvan A.—**K**
Goldin, Albert G.—**J**
Goldman, Martyn A.—**J**
Goldsborough, John N.—**J**
Goldstein, David H.—**J**
Goldstein, Isadore—**J**
Goldstein, Joseph L.—**J**
Goli, Venkateswara R.—**PER**
Gomez, Luis M.—**PK**
Goode, Lyndon S.—**CHR**
Goodenow, Thomas J.—**F**
Goodin, Robert R.—**J**
Goodman, R. Michael—**GRT**
Goodman, Robert P.—**F**
Goodwin, J. Roger—**WRN**
Goodwin, Peter D.—**K**
Goodwin, Robert A.—**WRN**
Gopinath, D. K.—**J**
Gordinier, John D.—**J**
Gordon, Abraham M.—**J**
Gordon, Armond T.—**J**
Gordon, John M.—**MAD**
Gordon, Samuel S.—**J**
Gordon, Wendell E.—**MRL**
Gossman, G. William—**J**
Gossman, M. Douglas—**NL**
Gould, Richard A.—**J**
Graff, Michael—**F**
Gragg, Logan—**F**
Graham, Jerry M.—**J**
Graham, III, S. Lyle—**J**
Granacher, Robert P.—**F**
Grantham, Everett G.—**J**
Graul, William J.—**WD**
Graulich, Kenneth B.—**F**
Graves, Edward C.—**J**
Graves, Harold B.—**J**
Graves, Stuart—**J**
Gray, Helen M.—**J**
Gray, Laman A.—**J**
Gray, Laman A.—**J**
Gray, Sr., William R.—**J**
Greathouse, Richard F.—**J**
Green, Gordon L.—**J**
Green, James W.—**J**
Green, Murphy H.—**HRL**
Green, Richard O.—**WRN**
Green, Thomas L.—**CAL**
Green, Jr., Lawrence P.—**WRN**
Greenberg, Richard—**J**
Greenberg, Robert B.—**J**
Greene, James R.—**F**
Greene, John F.—**EL**
Greene, Michael D.—**EL**
Greene, R. Glenn—**D**
Greene, Jr., John W.—**F**
Grefer, Michael A.—**C**
Gregory, Allen H.—**PUL**
Greiner, Alson L.—**K**
Greiver, S. Philip—**J**
Grider, Roger D.—**J**
Grider, Jr., Paul C.—**J**
Griffen, Ward O.—**F**
Griffin, David W.—**J**
Griffin, Larry P.—**J**
Griffin, Robert J.—**F**
Griffith, Gary L.—**F**
Griffith, George H.—**ROC**
Griffith, George W.—**ROC**
Grimaldi, Manuel—**J**
Grimes, Jr., Allen E.—**F**
Grino, Agripino D.—**JNS**
Grise, Richard F.—**WRN**
Grise, William P.—**MAD**
Groff, Diller B.—**J**
Grogan, Edwin L.—**MCRA**
Grosser, Timothy T.—**MAS**
Grover, John W.—**C**
Gruber, Gabriel G.—**J**
Grumbles, Cecil L.—**J**
Grumley, Paul J.—**MCRA**
Guarnaschelli, John J.—**J**
Gudex, Thomas V.—**J**
Guerrant, Edward O.—**CLK**
Guerrero, Elmer M.—**J**
Guerrero, Filipinas—**J**
Guerrero, Helen Q.—**J**
Guiglia, Theodore N.—**F**
Guiler, James M.—**F**
Guindi, Samir A.—**HRL**
Gulley, James G.—**BL**
Gultekin, Muharrem—**J**
Gumbert, George M.—**F**
Gunn, John Curtis—**C**
Gussler, Charles G.—**BD**
Gutgsell, Terence L.—**F**
Gutierrez, German—**MCRA**
Gutierrez, Rosa B.—**K**
Gwinn, Frank W.—**BD**
Gwinn, Jr., James S.—**MCRA**

H

Haas, Christopher T.—**LET**
Haas, Joseph F.—**C**
Haas, Roger A.—**C**
Hacker, William D.—**WT**
Haddad, Rolando I.—**J**
Haeberle, Clarence I.—**GRP**
Haeberle, Glenn—**BD**
Hafendorfer, Daniel L.—**J**
Hafendorfer, Kenneth A.—**J**
Hafner, John N.—**J**
Hagan, Herbert H.—**J**
Hagan, John Campbell—**F**
Hagan, Thomas W.—**J**
Hagen, Michael D.—**F**
Hager, W. David—**F**
Hagg, Dallas C.—**FR**
Hagg, Doyle D.—**FR**
Hagihara, Patrick F.—**F**
Haick, Edward M.—**J**
Halbleib, Ross A.—**WT**
Halcomb, Francis J.—**AL**
Hale, Joan R.—**J**
Haley, William B.—**MCRA**
Hall, Amos—**HRD**
Hall, Charles N.—**WD**
Hall, D. P.—**J**
Hall, John M.—**AL**
Hall, Larry L.—**GRV**
Hall, Lon C.—**JNS**
Hall, Lyman S.—**TA**
Hall, Mary A.—**FLO**
Hall, Maurice M.—**JNS**
Hall, Michael M.—**TA**
Hall, Paul B.—**JNS**
Hall, Robert A.—**JNS**
Hall, Ronald Douglas—**PK**
Hall, Tom E.—**WRN**
Hall, William M.—**PUL**
Hall, William P.—**MCRA**
Hall, William W.—**D**
Hall, Wreno M.—**HRD**
Hallay, Darrell L.—**K**
Haller, Harold D.—**J**
Hamberg, Marcelle—**J**
Hambley, William C.—**PK**
Hamburg, Joseph—**F**
Hamilton, Harry A.—**WT**
Hamilton, James E.—**J**
Hamilton, Michael T.—**J**
Hamilton, Richard A.—**WSH**
Hamilton, Ronald D.—**F**
Hamilton, Thomas E.—**F**
Hamilton, William B.—**BUL**
Hamm, Robert W.—**SH**
Hamm, Ronald J.—**J**
Hamman, Jack L.—**HO**
Hammons,* James W.—**F**
Hammons, Stanley—**F**
Hamner, Donald L.—**BL**
Hamon, Allen J.—**NC**
Hancock, James K.—**J**
Hand, Edward K.—**HRD**
Handelman, Cathryn C.—**J**
Handelman, Nathaniel I.—**J**
Handley, William R.—**HRD**
Hanekamp, Edwin H.—**D**
Hanes, Mervel V.—**J**
Hanka, Marvin J.—**J**
Hanking, William H.—**FR**
Hanley, Michael J.—**F**
Hanley, William J.—**J**
Hanson, Michael B.—**F**
Harbrecht, Phil J.—**J**
Hardaway, Julian R.—**BL**
Harding, Calvin R.—**J**
Harding, Donnan B.—**F**
Hargadon, Charles M.—**J**
Hargett, Herbert—**J**
Harkess, James W.—**J**
Harkness, Joseph C.—**F**
Harlowe, Stuart—**J**
Harned, John W.—**CHR**
Harrell, Frank W.—**J**
Harris, Albert B.—**J**
Harris, Bill H.—**F**
Harris, Charles R.—**MAD**
Harris, Henry S.—**WRN**
Harris, J. Kenneth—**J**
Harris, Martin J.—**J**
Harris, Walter D.—**F**
Harrison, Alvin R.—**BL**
Harrison, Harold L.—**J**
Harrison, John N.—**PUL**
Harrison, John W.—**BD**
Hart, James C.—**CAl**
Hart, Jerry T.—**CHR**
Hart, Vernon F.—**F**
Hart, William G.—**CAL**
Harting, Jr., John E.—**J**
Harty, James I.—**J**
Harvey, Daryl P.—**BAR**
Hast, Robert L.—**D**

Hatam, Ahmad—**J**
Hatcher, Ronald L.—**WRN**
Hatfield, Danny R.—**HO**
Hatfield, Stephanie R.—**HO**
Hatfield, William D.—**BRK**
Haugh, Donald C.—**GRV**
Hausladen, Siegried L.—**K**
Hauswald, Kenneth R.—**BD**
Havens, Thomas R.—**J**
Hawkins, James M.—**MCRA**
Hawn, William F.—**J**
Hay, Floyd B.—**CLN**
Hayden, Raymond E.—**KX**
Hayden, Violetta T.—**KX**
Hayden, William G.—**D**
Hayes, Oscar J.—**J**
Hayes, Ray H.—**J**
Hayman, Mary L.—**J**
Haynes, Douglas M.—**J**
Haynes, Jr., Harold C.—**F**
Hays, Talmadge V.—**BE**
Haywood, Kenneth P.—**HO**
Hazlett, Claude C.—**J**
Head, James R.—**MNR**
Healy, Mark H.—**J**
Hearne, Michael J.—**HO**
Heavern, Thomas L.—**C**
Hechema, Cherif E.—**MAD**
Hedges, Jr., Houston—**J**
Hedrick, James A.—**NL**
Heimbrock, Robert G.—**K**
Heine, Burton M.—**J**
Heine, Karl E.—**HO**
Heine, Lee A.—**J**
Heinicke, Mark H.—**J**
Heinz, Wilbur A.—**LIN**
Heitz, Raymond—**J**
Heizer, William L.—**F**
Hellebusch, Arthur A.—**F**
Hellmann, Jack K.—**J**
Hemmer, John A.—**J**
Hemmer, Robert E.—**K**
Hemmings, Jr., Ira L.—**F**
Hench, Richard F.—**F**
Henderson, J. Bates—**MAD**
Henderson, III, A. H.—**F**
Hendon, James R.—**J**
Hendren, Robert D.—**NL**
Hendrickson, Robert F.—**BL**
Henkel, Terry W.—**J**
Henry, Carl—**D**
Heringer, Jr., Howard A.—**K**
Hermann, George J.—**C-K**
Herms, Ralph A.—**F**
Hernandez, Alfonso—**J**
Hernandez, Calixto—**FR**
Hernandez, Juan B.—**J**
Herrera, Jr., A. G.—**AD**
Herrman, Henry C.—**J**
Herrmann, Thomas L.—**HO**
Hersh, Joseph H.—**J**
Hess, Lee C.—**BOO**
Hess, Michael C.—**NL**
Hess, P. Patrick—**J**
Heyburn, Martha Keeney—**J**
Hibbs, III, Russell A.—**HND**
Hicks, Brook G.—**MU**
Hicks, Lewis P.—**F**
Hicks, Shelby L.—**J**
Hieronymus, Jr., C. J.—**FLO**
Higdon, Orion Leon—**MCRA**
Higgins, Edwin L.—**K**
Hightower, Edward C.—**F**
Hiland, Steve—**LY**
Hilb, Jeffrey A.—**J**
Hilgeford, Eric J.—**J**
Hill, Byron W.—**HND**
Hill, David L.—**J**
Hill, John S.—**F**
Hill, Keene M.—**HRT**
Hiller, A. Joe—**F**
Hiltz, Lawrence T.—**K**
Hines, Cynthia R.—**HO**
Hines, John H.—**BUL**
Hines, Ralph C.—**HO**
Hinkebein, James M.—**J**
Hite, Suzanne M.—**J**
Hitt, Owen K.—**J**
Hobbs, John T.—**F**
Hobbs, Thomas G.—**F**
Hodel, Paul E.—**HRL**
Hodge, Kenneth W.—**J**
Hodge, Steven J.—**J**
Hodges, Pamela S.—**J**
Hodsden, James E.—**J**
Hofer, Jeffrey S.—**D**
Hoffman, Charles R.—**J**
Hoffman, Delbert G.—**J**
Hoffman, Phillip H.—**F**
Hoffman, Robert L.—**HO**
Hoffman, Jr., Russell—**J**
Hoffmann, Robert J.—**K**
Hogancamp, Charles E.—**MCRA**
Hogancamp, Glenn E.—**MCRA**
Holbrook, Paul E.—**BD**
Hollander, Jayne L.—**J**
Hollen, Jake T.—**BAR**
Hollins, Gordon—**HRL**
Hollinsworth, John L.—**J**
Hollis, John W.—**BD**
Holloway, James B.—**F**
Holman, William A.—**J**
Holmes, Booker T.—**FR**
Holmes, J. William—**J**
Holmes,* James E.—**MRL**
Holmes, John C.—**C**
Holt, Homer A.—**J**
Holt, Jack B.—**LO**
Holt, Richard T.—**J**
Holtgrave, Dorothy E.—**J**
Holtman, James S.—**J**
Holtman, Judy H.—**J**
Honey, Edward G.—**C**
Hopkins, William E.—**J**
Hopkins, Jr., Sidney F.—**F**
Hopwood, Anne H.—**D**
Horan, Leo G.—**J**
Horton, James K.—**J**
Hosbach, William H.—**MCRA**
Hoskins, III, Albert B.—**J**
Houchin, Edward G.—**OL**
Houghton, William J.—**J**
Houston, Hal E.—**CAL**
Houston, Hugh L.—**CAL**
Houston, Robert L.—**HNR**
Houston, Wilbur R.—**BOO**
Hoven, Ardis D.—**F**
Howard, Carroll E.—**D**
Howard, Charles D.—**WSH**
Howard, Charles E.—**GRV**
Howard, Donald E.—**FR**
Howard, John D.—**J**
Howard, R. Brooks—**J**
Howard, Robert S.—**HRL**
Howard, Ronald F.—**CHR**
Howard, Russell E.—**CAL**
Howe, Allie E.—**C**
Howe, Walter R.—**J**
Howell, Joyce E.—**J**
Howell, Robert S.—**J**
Howell, Jr., Marshall G.—**HND**
Howell, Jr., Robert—**J**
Howerton, Lonnie W.—**J**
Howse, James L.—**FR**
Hoy, Robert T.—**C-K**
Hoy, Jr., William E.—**BD**
Hromyak, Jr., George F.—**FR**
Hsieh, Hsing Y.—**WRN**
Huang, Tsung-Yau—**J**
Hubbard, John G.—**J**
Hubbard, John S.—**CLK**
Hubbuch, Anthony—**J**
Hubbuch, Sebastian—**J**
Huber, Charles H.—**J**
Hudson, Richard T.—**J**
Huey, James M.—**BOO**
Hugan, Clare C.—**K**
Hughes, Donald G.—**CAL**
Hughes, Elmo K.—**J**
Hulett, Paul M.—**J**
Hull, David A.—**F**
Huller, Jr., Ralph F.—**K**
Hulsman, Philip J.—**J**
Humbert, Jr., Vernon H.—**F**
Hume, Walter I.—**J**
Hummel, Jr., John D.—**J**
Humpert, Edward L.—**K**
Humpert, Joseph H.—**K**
Humphrey, David M.—**J**
Hunsaker, John C.—**F**
Hunt, Hilary L.—**MCRA**
Hunt, Jr., Jesse M.—**BAL**
Hunter, Bush Alexander—**F**
Hunter, James B.—**F**
Hunter, Stuart M.—**J**
Hunter, Sylvester G.—**BD**
Huntsman, Harry B.—**GRN**
Hurlocker, James K.—**HRL**
Hurst, Arthur T.—**J**
Hurst, Jr., Arthur T.—**J**
Hurt, Lawrence E.—**F**
Hurt, O. James—**J**
Hurtiz, Hildebrando R.—**CHR**
Hutchins, Louise F.—**MAD**
Huth, Thomas J.—**K**
Hutsell, Thomas S.—**J**
Hutson, Richard M.—**MCRA**
Hyde, Gordon L.—**F**
Hyden, Alan J.—**FLO**
Hyman, J. Barrett—**J**

I

Ibayan, Domingo M.—**J**
Ice, John F.—**J**
Ignacio, Olegario J.—**J**
Ikramuddin, Kamar I.—**FLO**
Ikramuddin, Syed—**FLO**
Im, Yung K.—**K**
Irick, Max—**J**
Irigoyen, David E.—**J**
Irlandez, Didsdado—**J**
Irwin, Jeri P.—**J**
Isaacs, Arthur H.—**J**
Isaacs, Avrom M.—**J**
Isaacs, Sidney—**F**
Ishkanian, Prospero—**J**
Ison, Claude B.—**LRL**
Izquierdo, Albert G.—**C-K**

J

Jaafar, M. Y.—**MCRA**
Jackson, Billy G.—**GRV**
Jackson, Billy J.—**FR**
Jackson, Christman S.—**BL**
Jackson, Elmer H.—**BL**
Jackson, Raymond C.—**MAD**
Jackson, Richard G.—**BL**
Jackson, Vester A.—**F**
Jackson, William E.—**MCRA**
Jackson, William J.—**J**
Jackson, William M.—**BL**
Jackson, Jr., Herschel—**CAL**
Jackson, Jr., Richard G.—**BL**
Jacob, Robert A.—**J**
Jacobi, James M.—**J**
Jacobs, Alfred A.—**K**
Jacobs, Jamie J.—**F**
Jacobs, John A.—**C**
Jaegers, Kenneth R.—**J**
Jagdale, Balkrishan T.—**PER**
Jager, Nirmala M.—**J**
James, Grace M.—**J**
James, III, Thomas—**J**
Jankowski, Dennis A.—**J**
Janney, W. Donald—**K**
Jansing, C. William—**D**
Jarboe, Charles H.—**J**
Jarboe, Thomas M.—**F**
Jarrett, Robert T.—**FLM**
Jarvis, Angela L.—**D**
Jarvis, Michael—**D**
Jasper, Patrick L.—**PUL**
Jasper, Robert Bryant—**PUL**
Jasper, Stephen T.—**PUL**
Jayme, Alberto M.—**PUL**
Jelsma, Lawrence F.—**J**
Jelsma, Richard K.—**J**
Jenkins, Douglas H.—**MAD**
Jenkins, Frank M.—**F**
Jenkins, Van R.—**F**
Jennings, Clifford V.—**J**
Jennings, William N.—**J**
Jernigan, William R.—**HO**
Jewell, James R.—**J**
John, Becky L.—**PER**
John, Maurice E.—**J**
John, Michael D.—**J**
Johnson, Alan G.—**HO**
Johnson, Alan H.—**HND**
Johnson, Ann H.—**D**
Johnson, Eunice Louise—**F**
Johnson, J. Jeff—**MCRA**
Johnson, J. Wesley—**BD**
Johnson, James L.—**HO**
Johnson, John R.—**J**
Johnson, Marshall R.—**HRD**
Johnson, Robert K.—**K**
Johnson, Robert T.—**OH**
Johnson, Ronald M.—**D**
Johnson, Sandra L.—**J**
Johnson, Walter R.—**MCRA**
Johnson, William M.—**PK**
Johnson, William W.—**J**
Johnson, Jr., Hollis—**J**
Johnson, Jr., James E.—**F**
Johnston, Coleman C.—**F**
Johnston, David H.—**F**
Johnstone, John M.—**MAD**
Jones, Boyce E.—**LRL**
Jones, Conrad H.—**CAL**
Jones, Erwin A.—**F**
Jones, Hunt B.—**J**
Jones, James B.—**F**
Jones, Janet H.—**F**
Jones, John O.—**GRP**
Jones, Max P.—**PK**
Jones, Michael J.—**MCRA**
Jones, Peter H.—**F**
Jones, Raymond E.—**J**
Jones, Walter D.—**J**
Jones, Walter S.—**J**
Jones, Wilfred F.—**HRL**
Jorjani, Manoocheh—**WT**
Jorrisch, Mark Steven—**J**
Jose, Baby—**J**
Joslin, Albert H.—**D**
Joule, William W.—**J**
Joyce, Ellen M.—**FLO**
Judge, III, Charles A.—**LET**
Jue, Fun Far—**J**
Jugo, Slobodan B.—**MU**
Julian, Bruce A.—**F**
Jurich, Nicholas R.—**FLO**
Jurige, John H.—**J**
Justice, Oren W.—**BD**
Kahle, Louis L.—**J**
Kaiser, Robert J.—**J**
Kakascik, Gerald E.—**MCRA**
Kanovitz, Bob S.—**J**
Kaplan, Martin P.—**F**
Kaplan, Martin Z.—**J**
Kappes, Paul J.—**C**
Karalakulasingam, Raja—**J**
Karibo, John M.—**J**
Karp, David W.—**J**
Karr, Leslie E.—**WT**
Kasdan, Morton L.—**J**
Kasey, Arthur R.—**J**
Kash, Roy M.—**MNT**
Kastan, Louis Berman—**J**

Kasten, Gregory W.—**F**
Kateryniuk, Nina—**J**
Katz, David S.—**J**
Katz, Donald B.—**J**
Katz, Lowell D.—**J**
Kaufmann, Maurice—**F**
Kavanaugh, C. Nicholas—**F**
Kavolus, Joseph M.—**D**
Kawas, Elias E.—**HO**
Kawerk, Jean—**C**
Kayerker, Udayakumar M.—**J**
Keaney, John M.—**J**
Keeley, John C.—**D**
Keeling, Marie M.—**J**
Keen, Harold—**WRN**
Keeney, Arthur H.—**J**
Keeney, Virginia T.—**J**
Keeton, James M.—**BD**
Keightley, James M.—**MER**
Keightley, Jr., James M.—**F**
Keisler, Robert L.—**J**
Keith, Willard L.—**MU**
Keller, William H.—**FR**
Keller, William K.—**J**
Kelley, Ronald L.—**MCRA**
Kelley, Stephen B.—**PUL**
Kelley, Jr., Thomas A.—**J**
Kelly, Dennis B.—**F**
Kelly, James J.—**K**
Kelly, Prue W.—**CAL**
Kelsay, William Robert—**WN**
Kelty, Karl C.—**F**
Kemper, F. Warren—**J**
Kemper, Michael G.—**J**
Kenady, Sr., Daniel E.—**F**
Kennedy, Auddie C.—**HND**
Kennedy, Jr., Harry R.—**PUL**
Kerby, Clifford F.—**MAD**
Kernohan, William J.—**WRN**
Kerr, Roscoe I.—**J**
Khanna, Ashok K.—**BD**
Kho, Eusebio C.—**J**
Khorram, Houshang—**BE**
Kibler, W. Ben—**F**
Kidd, Astra V.—**HRD**
Kidd, Robert C.—**K**
Kidd, Robert R.—**J**
Kielar, Richard A.—**F**
Kiesel, John L.—**F**
Kim, Chun Hong—**BD**
Kim, Kil-Bong—**PK**
Kim, Seong Soo—**HND**
Kim, Suk Ki—**D**
Kim, T. Andrew—**MCRA**
Kim, Yoon K.—**K**
Kim, Young Sook—**D**
Kimbel, Esten S.—**FR**
Kimberlin, Ronald M.—**HND**
Kimbler, Richard W.—**FR**
Kimbrough, George B.—**J**
Kimsey, Letitia S.—**J**
Kincaid, Charles A.—**J**
King, Harold L.—**MRL**
King, Malcolm H.—**BD**
King, Nettie G.—**J**
King, Wallace M.—**J**
King, Jr., James C.—**F**
Kingsolver, Wendell R.—**NC**
Kinnaird, David W.—**J**
Kinnaird, Robert—**F**
Kircher, Christopher—**J**
Kirk, Cary T.—**HO**
Kirk, Clyde R.—**FR**
Kirkpatrick, Charles L.—**BE**
Kirtley, Louis R.—**J**
Kissinger, Charles C.—**HND**
Kiteck, Stephen S.—**PUL**
Klapper, Phillip B.—**CAL**
Klein, Howard William—**J**
Kleinert, Harold E.—**J**
Kleinhenz, Robert W.—**HRD**
Kleinsteuber, Walter—**J**
Klemm, Janet E.—**MCRA**
Kleykamp, Paul R.—**BD**
Kleykamp, Jr., Ray—**BD**
Klingenberg, Paul H.—**K**
Klompus, William H.—**HO**
Kmetz, Donald R.—**J**
Knepper, Orcena F.—**F**
Knight, E. Ray—**J**
Knoop, J. Douglas—**F**
Knutson, Carl O.—**J**
Koby, Jay S.—**J**
Koby, Melvyn M.—**J**
Koehler, Frederick—**C**
Koff, Ronald M.—**HNR**
Koffler, Bruce H.—**F**
Koh, Suk K.—**WSH**
Kolb, Gisela E.—**J**
Kolb, Katherine L.—**J**
Kolb, III, Frank J.—**MCRA**
Kommor, Zollman—**J**
Koons, Dexter D.—**J**
Korn, Allan M.—**HND**
Kosfeld, Rodney E.—**J**
Kotcamp, Wayne Wheeler—**J**
Kotchen, J. Morley—**F**
Kotchen, Theodore A.—**F**
Kotheimer, Anita R.—**SH**
Kotoyan, Marcos A.—**J**
Kovachevich, Rudy—**J**
Kovacs, Andrew J.—**PUL**
Kozhipat, Ancilla—**J**
Kral, Kenneth J.—**J**
Kratz, Robert C.—**C**
Kraus, John W.—**MCRA**
Kraus, Robert F.—**F**
Krecker, Edward C.—**J**
Kreilein, Joel G.—**K**
Kremer, III, Eugene H.—**J**
Kremer, Jr., Eugene H.—**J**
Kruer, Richard D.—**C**
Krumpleman, Jr., J. L.—**MAD**
Kubota, Thomas T.—**J**
Kucukcetin, Irfan—**J**
Kudmani, George—**J**
Kuhn, Clifford C.—**J**
Kuhn, John E.—**J**
Kuhn, Wolfgang F.—**J**
Kuhn, Jr., Forrest S.—**J**
Kuhns, Dwight M.—**J**
Kuhns, James G.—**J**
Kukreja, Rachpal S.—**PK**
Kulam, Abdulkader M.—**HO**
Kumar, Sushil V.—**J**
Kumpe, Carl W.—**K**
Kunajukr, Sutip—**FLO**
Kung, Markus K.—**F**
Kuo, Sanford H.—**F**
Kupper, Ronald M.—**MCRA**
Kutnicki, Benjamin—**CAR**
Kutz, Joseph E.—**J**
Kuzman, John H.—**BOO**
Kyker, Paul G.—**F**

L

Lach, Jr., John A.—**J**
Lacy, Clint M.—**D**
Lacy, Jerome P.—**J**
Lam, Robert C.—**F**
Lamb, Shannon—**D**
Lambert, James H.—**HO**
Lambert, Jr., Glen E.—**J**
Lambert, Jr., Herman J.—**PER**
Lamkin, Jr., Nelson—**F**
Landis, Edward E.—**J**
Lane, Dennis—**PUL**
Lange, Amanda W.—**FR**
Langley, Jr., Leslie W.—**HRD**
Lansing, Allan M.—**J**
Lanter, Kenneth E.—**K**
Larmore, Kim S.—**F**
Larsen, Ferris I.—**HO**
Larson, Gerald M.—**J**
Larson, John B.—**J**
Larson, Jr., John B.—**J**
Larumbe, Dick C.—**BD**
Lavery, J. Patrick—**J**
Law, Frank D.—**CAR**
Lawson, George M.—**J**
Leake, Robert S.—**K**
Leatherman, Kenton D.—**J**
Leavell, Ullin W.—**F**
Leblique, Leopold B.—**J**
Lee, Ho Woon—**ROW**
Lee, James M.—**J**
Lee, Joseph M.—**GRY**
Lee, Yung Poe—**HRL**
Leedhanachoke, Oon—**PK**
Leger, Anthony F.—**HRL**
Leggett, Jr., Albert E.—**J**
Leguizamon, Carlos A.—**J**
Lehman, Robert J.—**J**
Lehn, Frank W.—**J**
Lehocky, Ronald—**J**
Leichter, Steven B.—**F**
Leigh, Lynn W.—**HO**
Leight, Leonard—**J**
Leis, Albert E.—**J**
Leland, John H.—**OL**
Lemon, Frank R.—**F**
LeNeave, Charles D.—**GRV**
Lenn, Steven D.—**BL**
Lennarson, Vincent A.—**F**
Leonard, Thomas P.—**FR**
Leonard, Jr., Thomas P.—**SH**
Lepanto, Phillip B.—**J**
Lerman, Robert I.—**J**
Lerner, Sheldon—**J**
LeRoy, Joseph B.—**J**
LeSage, Jean B.—**BE**
Leslie, Larry M.—**FLO**
Leslie, Rondall H.—**FLO**
Lessenberry, H. Barrett—**HO**
Lett, Paul E.—**BD**
Levin, Richard D.—**BOO**
Levin, Richard M.—**J**
Levine, Ronald L.—**J**
Levy, William I.—**F**
Lewis, Barnett W.—**F**
Lewis, David T.—**HRD**
Lewis, F. Cohen—**BRT**
Lewis, H. Paul—**C**
Lewis, Jack D.—**MAD**
Lewis, Paul R.—**CTR**
Lewis, Jr., Blaine—**J**
Lewis, Jr., Norman V.—**J**
Lieber, Arthur—**F**
Liebert, Jr., Carl W.—**J**
Liebman, Jacob—**F**
Liebman, Joseph—**FR**
Liebschutz, David C.—**BL**
Life, Darrell D.—**CLA**
Liles, Wayne C.—**HND**
Lim, Pedro K.—**BD**
Lindeman, Robert D.—**J**
Lindsay, Dwight E.—**J**
Lineberry, Tristan K.—**HO**
Ling, Ji-toong—**J**
Linss, William P.—**C-K**
Linville, Aaron W.—**BOU**
Lira, Aurora M.—**K**
Lister, Graham D.—**J**
Litzenberger, W. A.—**HRD**
Liu, Pinghui V.—**J**
Liu, Yong K.—**J**
Llewellyn, John S.—**J**
Lloyd, John A.—**J**
Lockett, Fredericka C.—**NL**
Lockwood, William B.—**J**
Loeb, Thomas M.—**J**
Logan, Thomas B.—**HND**
Logan, III, John A.—**HND**
Logsdon, Martin T.—**J**
Logsdon, Jr., Joseph E.—**J**
Lolley, David M.—**HO**
Long, Graydon A.—**F**
Long, Robert C.—**J**
Long, Robert J.—**MAD**
Long, Russell S.—**FR**
Long, William L.—**CHR**
Longshore, Robert T.—**K**
Lopecillo, Goldelina—**J**
Lopez, Edgar A.—**J**
Loucks, John D.—**D**
Love, Jon R.—**HO**
Love, Selby V.—**J**
Loventhal, John P.—**F**
Lovett, John D.—**D**
Lowe, Virgil D.—**HO**
Lowenbraun, Stanley—**J**
Lowrey, Jr., Ferrell C.—**J**
Lowry, Clifton E.—**D**
Lowry, Conie C.—**CAL**
Loy, Millard C.—**AD**
Lubbe, Ronald J.—**K**
Lubbers, Roger L.—**PK**
Lucas, Aaron E.—**J**
Lucas, Bruce A.—**F**
Lucas, Charles T.—**J**
Ludwig, Arnold M.—**F**
Luftman, Martin J.—**F**
Lukins, Joseph L.—**BL**
Lykins, Robert W.—**J**
Lykins, Samuel W.—**F**
Lynch, Theodore N.—**J**
Lynd, Priscilla A.—**F**
Lyon, Wendell V.—**BD**

M

MacFarlane, Noble T.—**F**
MacGregor, Roderick H.—**TRM**
Mack, H. Burl—**J**
Mack, II, James C.—**J**
MacKay, Jean M.—**WT**
Mackrell, Thomas N.—**J**
MacMillan, Duncan R.—**J**
Maddela, Ricardo B.—**HND**
Maddela, Zenaida A.—**WB**
Maddiwar, Gangadhar L.—**FLO**
Maddox, Paul F.—**WF**
Maddox, Jr., Tom S.—**D**
Maddux, Howard Gregory—**CR**
Magallon, Robert A.—**J**
Magary, Victor J.—**K**
Magruder, Margaret B.—**MCRA**
Maguire, Herbert T.—**J**
Maguire, Lawrence C.—**F**
Mahaffey, Charles K.—**BL**
Mahaffey, Daniel E.—**J**
Mahaffey, Hugh—**MAD**
Mahaffey, J. Herman—**J**
Mahaffey, Logan M.—**J**
Mahalingashetty, P. B.—**PER**
Mahan, J. Marshall—**J**
Mahr, Merle M.—**HO**
Maier, Godfrey G.—**J**
Maionchi, Paula M.—**MAD**
Makk, Laszlo—**J**
Maldonado, Alberto R.—**J**
Malek, John C.—**F**
Malempati, Indira—**PK**
Malempati, Srihari—**PK**
Malik, Ahmed M. A.—**PK**
Maliyekkel, IttoopT.—**CHR**
Mallik, Balwant S.—**J**
Malubay, Fiorello G.—**U**
Manchikanti, Laxmaiah—**MCRA**
Mandelstam, Paul—**F**
Mangla, Lal Chand—**PER**
Mani, Srinivasan S.—**HO**
Manlavi, Thelma S.—**CHR**
Mann, Nirmal S.—**J**
Mann, Wanless R.—**TA**
Manongdo, Ernesto M.—**CHR**
Manthey, Frank A.—**TO**
Mappala, Francisco C.—**BE**
Marchal, Gilbert E.—**J**

Marchand, John H.—**HND**
Marchand, Leopold—**ROW**
Marcum, Aaron T.—**J**
Marcum, Sidney G.—**J**
Mardis, Richard E.—**J**
Marion, Eugene L.—**BAR**
Marker, Douglas E.—**K**
Marquardt, Robert G.—**CAL**
Marrs, William—**BAR**
Marsh, John C.—**BAR**
Marshall, Ernest W.—**J**
Marshall, James A.—**J**
Marshall, Jennings B.—**J**
Marshall, Joseph C.—**J**
Marshall, M. Ernest—**HO**
Marshall, Thomas M.—**J**
Marshall, Thomas R.—**J**
Martin, Cecil D.—**CAR**
Martin, Charles E.—**F**
Martin, Dan A.—**HO**
Martin, Denis G.—**J**
Martin, Florentin A.—**BL**
Martin, Herman E.—**BD**
Martin, Homer B.—**J**
Martin, Jerry W.—**WRN**
Martin, Keith—**BD**
Martin, Larry Edward—**J**
Martin, Lewis E.—**LO**
Martin, Lowell D.—**FLO**
Martin, Roy A.—**J**
Martin, Jr., Edward K.—**FR**
Martinez, Aureliand—**C**
Martinez, Serge A.—**J**
Maruyama, Yosh—**F**
Masden, Ronald R.—**J**
Mason, Aaron S.—**F**
Mason, Larry M.—**CLN**
Masri, Zahi H.—**J**
Massey, William O.—**PUL**
Massie, Francis Milton—**WD**
Matallana, Jorge E.—**J**
Matheny, Robert B.—**BE**
Mathew, Shiela—**J**
Mathews, III, Mack R.—**J**
Mathis, Charles H.—**LO**
Matibag, Victor P.—**J**
Matthew, William H.—**CTR**
Mattingly, Joan E.—**F**
Mattingly, Sally S.—**F**
Mattingly, William T.—**F**
Mattox, Alfred E.—**J**
Maurer, Joseph E.—**J**
Mavroudis, Constantine—**J**
Maxson, William T.—**F**
Maxwell, Edward N.—**J**
Maxwell, Jr., Edward N.—**F**
May, Russell T.—**J**
May, Sean S.—**CHR**
Maya, Gaston N.—**J**
Maver. Jacob M.—**GRV**
Mayer, Lloyd D.—**F**
Mayer, Thomas M.—**C**
Mayo, W. Porter—**F**
Mays, E. Truman—**PUL**
Mays, Terrell D.—**HRD**
McAlister, Jr., Terrence—**BD**
McAllister, Donald T.—**J**
McAllister, Roseann G.—**J**
McAllister, Jr., Russell—**F**
McBee, Michael H.—**GRV**
McCabe, Robert J.—**C**
McCall, Michael W.—**J**
McClane, John R.—**J**
McClary, Lowell R.—**J**
McClellan, Jr., John W.—**HND**
McClendon, Robert L.—**J**
McClure, G. David—**J**
McClure, George M.—**BL**
McClure, Larry T.—**GRY**
McCord, Gerald H.—**CHR**
McCormack, William M.—**D**
McCoy, Martha T.—**J**
McCracken, John E.—**MCRA**
McCready, Robert A.—**F**
McCrocklin, George W.—**J**
McCrocklin, Kenneth H.—**CAR**
McCullough, Sr., James—**J**
McDaniel, William E.—**F**
McElheney, Diane M.—**BOO**
McElwain, William P.—**AN**
McEndre, Roy B.—**LO**
McFadden, Don C.—**MNT**
McFarland, Ronald M.—**WN**
McGaffee, Dana Joy—**J**
McGavic, John D.—**J**
McGee, Edgar M.—**F**
McGee, Hilda J.—**J**
McGhee, William R.—**MU**
McGlinn, Joan F.—**J**
McGrath, Robert J.—**J**
McGuire, Jr., Tom O.—**PK**
McHargue, Claude L.—**WN**
McHargue, Frederick B.—**F**
McIntosh, Michael G.—**K**
McKay, John A.—**D**
McKee, Willis P.—**SH**
McKee, Jr., Willis P.—**FR**
McKelvey, Charles H.—**D**
McKenney, Robert L.—**PND**
McKeown, John M.—**J**
McKiernan, Jr., James E.—**J**
McKinley, Carolyn H.—**BAR**
McKinley, George G.—**BAR**
McKinley, Robert N.—**BAR**
McKinney, Douglas E.—**BD**
McKinney, Joseph E.—**MAS**
McLain, Jr., Lee Wm.—**J**
McLaughlin, Martha D.—**J**
McLaughlin, II, Arthur J.—**J**
McLeod, Robert N.—**PUL**
McMahon, James R.—**J**
McManis, James C.—**F**
McManus, William A.—**D**
McMartin, Daniel D.—**J**
McMillan, Gary L.—**MCRA**
McMorrow, R. Gregory—**F**
McMurry, Gorden T.—**J**
McNeely, James D.—**J**
McNerney, Jules J.—**CHR**
McQuady, Jr., Robert L.—**J**
McRoberts, J. William—**F**
McWhorter, Howard B.—**BD**
Meadors, Marvin P.—**J**
Mecca, Raymond V.—**BD**
Meckler, Roy J.—**J**
Medley, Jr., R. Wathen—**D**
Medrosa, Melanio Y.—**PUL**
Meeker, Jr., William R.—**F**
Meier, Gerald F.—**HO**
Meigs, Lamar C.—**BD**
Melo, Julio C.—**J**
Melton, Gary J.—**GRT**
Mendiondo, Oscar A.—**F**
Menke, Richard J.—**K**
Mercer, Charles B.—**J**
Meriwether, Robert P.—**MCRA**
Mersack, Ira P.—**F**
Mersch, William J.—**K**
Meyer, David Andrew—**F**
Meyer, Dexter—**PK**
Meyers, James A.—**J**
Meyers, Stephen F.—**C**
Middleton, Jr., James W.—**HRT**
Milburn, Carol S.—**C**
Milburn, Joseph L.—**HO**
Miles, Richard S.—**RU**
Milholen, Linda S.—**LIN**
Millan, Joselito L.—**J**
Miller, Alfred O.—**J**
Miller, Dan—**CAL**
Miller, David S.—**CAR**
Miller, Elgan L.—**J**
Miller, Frank B.—**HO**
Miller, George E.—**C**
Miller, Harold M.—**HO**
Miller, James W.—**GRN**
Miller, John D.—**HRL**
Miller, John W.—**J**
Miller, Joseph R.—**MRL**
Miller, Lora S.—**PUL**
Miller, Robert B.—**MCRA**
Miller, Thomas R.—**F**
Miller, William L.—**MU**
Millett, Adrienne J.—**MAD**
Mills, Buell B.—**BE**
Mills, Clarence J.—**GRV**
Mills, Judy C.—**J**
Minish, Lawrence T.—**J**
Minix, Michael B.—**JNS**
Mintu Valera, Remedios—**PK**
Mitchell, Bruce B.—**J**
Mitchell, Dorothy E.—**J**
Mitchell, Edward L.—**J**
Mitchell, Richard A.—**J**
Mitchell, Wilber A.—**J**
Mitchell, William C.—**J**
Mitchell, William H.—**MAD**
Mitenieks, Alfreds—**CHR**
Mitzlaff, Louis—**J**
Moberly, Fred P.—**F**
Moberly, Harold S.—**CLK**
Modur, Raghuran S.—**PK**
Mody, Bharat—**BAR**
Mody, Bharati—**BAR**
Mohiuddin, Masarrat—**SCT**
Molloy, III, James F.—**J**
Molony, Dennis R.—**C**
Molony, Joseph Thomas—**K**
Monin, James E.—**RU**
Monnig, William B.—**K**
Monroe, Robert F.—**J**
Montero-Decock, F.—**J**
Montgomery, Roy W.—**HND**
Montgomery, W. O.—**MCRA**
Montgomery, Jr., E.—**BL**
Mooney, Charles S.—**F**
Moore, Andrew M.—**F**
Moore, Charles R.—**F**
Moore, Clyde T.—**J**
Moore, Condict—**J**
Moore, Frank H.—**WRN**
Moore, Gerald L.—**J**
Moore, Glenn I.—**F**
Moore, Herman R.—**J**
Moore, James E.—**BD**
Moore, Loran P.—**D**
Moore, Patrick J.—**J**
Moore, Vickie S.—**HO**
Moore, William R.—**J**
Moore, William T.—**WRN**
Moore, III, Bacon R.—**MER**
Moore, Jr., Charles C.—**BE**
Moore, Jr., Roy H.—**J**
Moorhatch, John M.—**J**
Moosnick, Franklin B.—**F**
Moossun, M. Hassen—**HRD**
Moran, Jr., Charles T.—**J**
Morehead, C. D.—**MCRA**
Moreman, II, Lucian Y.—**HRD**
Morford, Jack T.—**NC**
Morgan, A. Reeves—**GRV**
Morgan, Edgar B.—**J**
Morgan, H. Brooks—**F**
Morgan, Kirk D.—**J**
Morgan, William S.—**BOU**
Morgan, Jr., E. Byron—**J**
Moroz, Matthew A.—**OH**
Morris, Charles W.—**J**
Morris, Chester A.—**K**
Morris, John R.—**J**
Morris, Ralph C.—**J**
Morris, Walter R.—**J**
Morris, Jr., Charles F.—**J**
Morrison, Charles R.—**J**
Morrissey, Robert W.—**J**
Morrow, Philip G.—**J**
Morrow, Richard C.—**PUL**
Mortara, Richard H.—**F**
Moseley, Mortimer H.—**LY**
Moser, Roy J.—**K**
Moses, Bernard C.—**WT**
Moses, William M.—**J**
Mosley, Donald H.—**J**
Moss, James P.—**J**
Moss, Kelly G.—**MAS**
Moss, Morris David—**BAR**
Moss, Sandra D.—**BAR**
Moss, William E.—**J**
Mostowycz, Leonidas—**F**
Mowry, Stephen P.—**J**
Moyer, Ronald P.—**J**
Muckenhausen, Christa—**PK**
Mudd, Joseph P.—**J**
Mudd, Lawrence R.—**J**
Mueller, Maurice J.—**K**
Mufti, Aziz Gul—**PUL**
Mujumdar, Suhas P.—**BE**
Mukherjee, Sudhideb—**SCT**
Mukherji, Chandra—**J**
Mukherji, Phatick K.—**J**
Muldrow, Jr., Louis M.—**F**
Mullen, Alvin B.—**J**
Mulliken, David K.—**PK**
Mullins, Fitzhugh—**J**
Munnell, Daniel M.—**MAD**
Murdock, Kenneth—**C**
Murphy, Douglas R.—**J**
Murphy, Owen B.—**F**
Murphy, Patrick J.—**J**
Murphy, Ralph A.—**PUL**
Murphy, Jr., Joseph K.—**J**
Murphy, Jr., Patrick—**BUL**
Murray, Marvin—**J**
Murrow, Joseph T.—**J**
Masgrave, Ernest E.—**JNS**
Mutchler, Bradford E.—**MCRA**
Myers, James P.—**CHR**
Myers, Mellayne R.—**F**
Myers, Robert K.—**HRD**
Myers, Wayne C.—**D**
Myers, Jr., John E.—**F**
Myers, Jr., Roland H.—**MCRA**
Myre, Louis D.—**MCRA**
Myre, Theodore T.—**MCRA**

N

Naber, John A.—**C**
Nacke, Morris—**J**
Nagar, Chander M.—**J**
Nagaraju, Hirikati S.—**J**
Nall, Michael S.—**J**
Narayan, Vaduvur S.—**J**
Naser, Ronald O.—**MED**
Nash, Arthur J.—**LET**
Nash, William N.—**J**
Nave, Richard R.—**J**
Nawab, Syed M.—**J**
Nayak, Irvathur N.—**PER**
Nedelkoff, Bogdan—**J**
Needleman, Michael D.—**J**
Neel, Donald R.—**D**
Neely, Warren F.—**J**
Nehil, John L.—**J**
Neimat, Samir R.—**J**
Nell, George O.—**AD**
Nell, George W.—**J**
Nell, James E.—**HO**
Nelson, Andrew P.—**FU**
Nelson, David—**J**
Nestor, Michael D.—**J**
Neustadt, David H.—**J**
Newberry, Robert C.—**WRN**
Newman, John S.—**HND**
Newton, Jack R.—**D**
Nichol, Tom D.—**J**
Nicholls, Paul J.—**F**
Nichols, Charles G.—**PK**
Nichols, Clem E.—**HRT**
Nichols, George R.—**J**
Nichols, Joe A.—**HRS**

Nichols, II, George R.—**J**
Nicholson, Charles H.—**F**
Nickel, Allan E.—**HO**
Nickel, Susan P.—**HO**
Nicol, Patricia K.—**FR**
Nighbert, Edwin J.—**F**
Nightingale, David S.—**J**
Noe, George W.—**MER**
Noel, Robert A.—**J**
Nolan, Edwin W.—**J**
Nolan, Robert B.—**J**
Nold, Robert L.—**J**
Nolph, Michael B.—**J**
Noonan, Jacqueline A.—**F**
Noonan, John D.—**MCRA**
Norsworthy, Eric A.—**J**
Norsworthy, Robert E.—**OH**
Norvell, Wyatt—**HNR**
Noss, Charles G.—**PO**
Noss, Glenn R.—**MCRA**
Nunemaker, Larry Wayne—**PUL**
Nunez, Albino G.—**HRL**
Nunnelley, Jr., Preston P.—**F**
Nunnelly, III, Sherrell—**J**
Nussbaum, Alan M.—**J**
Nutini, Carl J.—**K**
Nutini, Louis J.—**K**

O

O'Brien, Ethel H.—**J**
O'Brien, James O.—**J**
O'Brien, John D.—**J**
O'Brien, Michael D.—**C**
O'Connell, Richard L.—**MED**
O'Conner, Robert W.—**C**
O'Connor, Robert R.—**J**
O'Nan, Walter L.—**HND**
O'Nan, William W.—**HND**
O'Neill, Patrick A.—**D**
Oakley, Maurice J.—**BD**
Oberst, Charles R.—**J**
Oblander, Jr., Earnest F.—**J**
Odulio, Benito V.—**J**
Odulio, Brunhilde G.—**J**
Offutt, IV, William N.—**F**
Ogden, Lynn L.—**J**
Ogden, Owen S.—**J**
Ohler, Raymond A.—**WT**
Olash, F. Albert—**J**
Oldham, William E.—**J**
Oldham, William J.—**D**
Oliver, Earl P.—**AL**
Oliver, William J.—**J**
Olmstead, Willard B.—**F**
Olson, Lynn—**WRN**
Olson, Naven M.—**J**
Oropilla, Teresita B.—**J**
Orr, C. Pittman—**MCRA**
Orr, Robert A.—**GRV**
Orr, Jr., James A.—**F**
Orrahood, M. David—**D**
Ortines, Cesar G.—**LA**
Ortner, Alvin B.—**J**
Osborne, Mary L.—**J**
Overstreet, A. Evan—**J**
Overstreet, Robert G.—**J**
Overstreet, Sam A.—**J**
Owen, Lafayette G.—**J**
Owens, Harold W.—**BRK**
Owens, Jack W.—**J**

P

P'Pool, Billy W.—**CAL**
Pack, Rick—**J**
Padgett, Robert A.—**HRD**
Padgett, W. Neil—**D**
Page, Harvey A.—**PK**
Pagtakhan, Leonor S.—**PK**
Pahk, Elizabeth Y—**J**
Pajo, Jr., Fernando C.—**J**
Pal, Eugene J.—**J**
Palacio, Jose M.—**J**
Palmer, Francis F.—**CAR**
Palmer, Lee—**J**
Pancoast, John R.—**C**
Pape, Richard C.—**J**
Pappas, John E.—**F**
Park, Donald S.—**JNS**
Park, Frederic C.—**D**
Park, George R.—**F**
Park, Richard F.—**WT**
Park, Soon IE—**C**
Parker, David H.—**FR**
Parks, John H.—**F**
Parks, Paul J.—**WRN**
Parks, Sara J.—**D**
Parks, Stanley S.—**F**
Parr, Eugene Q.—**F**
Parrott, James A.—**CHR**
Parrott, Norman A.—**MCRA**
Parrott, Olson—**WD**
Parsley, Barry N.—**F**
Parsley, William M.—**J**
Parulekar, Sharad—**PER**
Pasignajen, Rolando A.—**MNR**
Passidomo, Michael A.—**PK**
Pate, John W.—**HO**
Patel, Ashokkumar R.—**PER**
Patel, Chandrakant C.—**J**
Patel, J. A.—**WN**
Patel, Kantibhai S.—**J**
Patel, Kirit T.—**F**
Patel, Kusum Kiri—**CHR**
Patel, Madhukanta J.—**PUL**
Patel, Satish R.—**F**
Patel, Sharad C.—**HRD**
Patel, Tarangini C.—**J**
Pathak, Jitendra A.—**LO**
Pathak, Kunja J.—**LO**
Patil, Jagdish S.—**WT**
Patil, Usha J.—**WT**
Patrick, Olney M.—**FR**
Patton, John A.—**MCRE**
Patton, Marcus—**WRN**
Pauly, Thomas H.—**F**
Paxton, D. Geraldine—**J**
Payne, Gabe A.—**CHR**
Payne, W. Faxon—**CHR**
Peak, William P.—**J**
Pearce, Charles E.—**J**
Pearce, Jan D.—**J**
Pearce, Luther W.—**J**
Pearson, William E.—**D**
Peck, Charles E.—**RU**
Pedigo, George W.—**J**
Peeno, Douglas O.—**J**
Peisel, Francis J.—**J**
Pellman, Martin J.—**J**
Pelstring, Mark F.—**K**
Pence, Hobert L.—**J**
Pendelton, Horace B.—**D**
Pengvanich, Chaisak—**J**
Penn, Dennis B.—**F**
Penner, Daniel B.—**J**
Pennington, Robert E.—**F**
Perellis, Maurice A.—**J**
Perez, Antolin J.—**J**
Perez, Manuel R.—**WRN**
Perlstein, Irving B.—**J**
Perlstein, Laurence F.—**J**
Perrine, John D.—**F**
Perry, Charles R.—**K**
Perry, John L.—**J**
Pesci, William L.—**BL**
Peters, C. Kenneth—**J**
Peterson, Gary H.—**J**
Peterson, Gilman P.—**HRT**
Peterson, Rodney A.—**J**
Peterson, Jr., Gilman P.—**BAR**
Peterson, Jr., Hugh R.—**J**
Peterson, Jr., Robert T.—**FU**
Petit, James—**K**
Petro, George J.—**J**
Petry, John A.—**J**
Pettey, Joe T.—**RU**
Petty, William M.—**J**
Petway, Willard J.—**MCRA**
Peveler, Michael L.—**J**
Peyton, Lewis T.—**J**
Peyton, Morris L.—**MOR**
Pfingst, Harry A.—**J**
Pfister, Glenn L.—**C**
Phelps, Jerry A.—**J**
Phillips, James E.—**MCRA**
Phillips, Reginald J.—**D**
Phillips, Jr., James K.—**WN**
Pickar, Daniel N.—**J**
Picklesimer, Frank M.—**JNS**
Pierce, W. Vincent—**C**
Pierce, Jr., Raymond E.—**J**
Pigman, Alger B.—**PER**
Pigman, Carl—**LET**
Pike, Lucy G.—**J**
Pike, Samuel P.—**HRD**
Pinho, Maria E.—**K**
Pinkstaff, Thomas H.—**F**
Pipkin, Doris—**J**
Pipkin, Fred—**J**
Pisacano, Nicholas J.—**F**
Pisterman, Sergio—**J**
Pitman, Roemer D.—**WT**
Pitzer, Frank R.—**CHR**
Playforth, Otto S.—**GAR**
Playforth, R. Herman—**F**
Plotkin, Gary R.—**HO**
Plumlee, John E.—**F**
Plymale, F. Glover—**J**
Podoll, Ronald E.—**J**
Podruch, Phillip E.—**J**
Poe, Jean A.—**FU**
Pokorny, Vaclav I.—**HO**
Polk, Jr., Hiram C.—**J**
Pollard, Stephen J.—**J**
Pongdee, Quen.—**BE**
Poore, Floyd G.—**BOO**
Pope, James G.—**F**
Pope, Janey Lynn—**J**
Pope, Robert G.—**J**
Pope, Robert N.—**J**
Popham, Bernard I.—**J**
Popham, Timothy B.—**J**
Poppens, Clifford A.—**D**
Porter, Andrew W.—**C**
Portnoy, Jane Zuger—**J**
Post, Henry W.—**J**
Potter, Ira B.—**FLO**
Potter, John R.—**BD**
Potts, Albert M.—**J**
Potts, Clinton R.—**J**
Poundstone, John W.—**F**
Poweleit, Alvin C.—**K**
Poweleit, Alvin D.—**K**
Powell, Glenn R.—**MER**
Powell, Robert W.—**J**
Powell, William C.—**CLN**
Powers, William—**Sh**
Powers, William H.—**J**
Prada, Benjamin—**J**
Prajapati, Dattatraya S.—**D**
Prater, Bryan N.—**MAS**
Pratt, Gerald R.—**WN**
Pratt, Mary L.—**PER**
Pratt, William D.—**LRL**
Preston, Charles L.—**F**
Preston, William O.—**F**
Prewitt, Elmer G.—**WT**
Prewitt, John H.—**F**
Price, Ann C.—**J**
Price, Charles L.—**OH**
Price, John R.—**CSY**
Price, Paul H.—**MCRA**
Privett, Jr., George W.—**F**
Procter, David H.—**GRP**
Prots, Robert A.—**LRL**
Proudfoot, Warren H.—**ROW**
Pruitt, Thomas D.—**HRL**
Puerto, Alfonso—**J**
Pugh, William E.—**J**
Puig, Jr., Francisco U.—**JNS**
Pulito, Andrew R.—**F**
Purcell, Carolyn F.—**F**
Purdom, Barry N.—**F**
Putnam, Louis R.—**K**

Q

Quader, Anwarul—**D**
Quaife, Clarence E.—**J**
Queen, Rogers L.—**J**
Quertermous, John C.—**CAL**
Quertermous, John R.—**CAL**
Quillin, Ralph C.—**F**
Quinby, Patricia M.—**J**

R

Rabb, Maurice F.—**J**
Rader, Emmanuel H.—**BE**
Radmacher, B. Frank—**J**
Radmanesh, M. H.—**PUL**
Radtke, Norman D.—**J**
Raff, Martin J.—**J**
Ragsdale, Jr., John W.—**FU**
Rainey, Fred C.—**HRD**
Rains, Darrel E.—**CHR**
Raitiere, Colin R.—**GAR**
Ram, Madhira D.—**F**
Ramey, James W.—**BL**
Ramsey, Barry W.—**F**
Ramsey, James T.—**FR**
Ramsey, John—**J**
Ramsey, William C.—**J**
Ramsey, III, Barton L.—**J**
Rand, Bernard O.—**J**
Randall, Frank W.—**F**
Rankin, C. Edward—**F**
Rankin, Carl B.—**J**
Rankin, Thomas P.—**J**
Ransdell, Jr., Herbert T.—**J**
Rapier, Jr., Joseph H.—**FLO**
Rashidian, John—**HND**
Raskin, Larry M.—**J**
Rastogi, Gopal K.,—**LRL**
Ratliff, John W.—**MRN**
Ravani, Pran D.—**J**
Ravenscraft, Howard L.—**BOO**
Ravvin, Leon J.—**F**
Rawlings, John—**FR**
Ray, Edward H.—**F**
Ray, Hugh L.—**BD**
Ray, J. Michael—**J**
Ray, Jr., Edward H.—**F**
Rayburn, Mack—**D**
Rayner, Abigail V.—**HO**
Reader, G. Scott—**HO**
Reams, Gerald B.—**BD**
Reams, Harold L.—**F**
Reckmann, Heimo—**AD**
Redden, John D.—**K**
Reddy, Mitta A. K.—**J**
Reddy, Narasimha—**BAR**
Reddy, Syamala H. K.—**PER**
Redinger, Richard N.—**J**
Redmon, James E.—**J**
Reed, George C.—**WD**
Rees, Allan H.—**J**
Reeves, John A.—**K**
Rehm, Stanley R.—**F**
Reich, David R.—**D**
Reichard, K. Thomas—**J**
Reichert, Robert E.—**K**
Reid, Ben A.—**J**
Reid, Robert L.—**D**
Reid, Samuel H.—**BL**
Reid, Jr., Ben A.—**J**
Reinecke Jr., Frank M.—**J**
Reiss, Frederick C.—**J**
Remo, Eduardo S.—**K**
Renaker, George A.—**K**

Resinger, Harold E.—**F**
Reusche, Juan M.—**F**
Reutlinger, Barton—**J**
Reutman, William E.—**BOO**
Reyes, Prudencio Y.—**HRL**
Reynolds, Glynn E.—**MAD**
Reynolds, Johnny G.—**J**
Reynolds, L. Raymond—**F**
Reynolds, Roy D.—**SMP**
Reynolds, Jr., Fred C.—**D**
Rhodes, Charles M.—**BD**
Rice, James F.—**J**
Rice, John F.—**J**
Rice, Robert L.—**MAD**
Rice, Russell R.—**J**
Rice, Samuel Lee—**CU**
Rice, William M.—**LIN**
Rich, George T.—**BL**
Rich, James R.—**K**
Richard, Henri-Claude—**HRD**
Richards, Glen D.—**D**
Richardson, J. David—**J**
Richardson, Otis M.—**HRD**
Richardson, Ronald L.—**J**
Richardson, Todd G.—**J**
Richey, Judy F.—**BAR**
Richman, Anne C. D.—**J**
Richman, Stephen P.—**J**
Richmond, Roland W.—**J**
Riddle, Bruce W.—**D**
Ridenour, Jr., James C.—**F**
Rider, Joan E.—**F**
Riegler, Sandra L.—**F**
Riehl, Richard E.—**J**
Rieser, James S.—**J**
Riestra, Evaristo—**BD**
Riggs, R. Kathleen—**F**
Rigor, Sr., Ben M.—**J**
Riherd, Leslie M.—**D**
Riker, William L.—**MER**
Riley, Jr., James M.—**J**
Rindani, Arun B.—**WT**
Ringel, David R.—**J**
Rison, Allan T.—**K**
Rivas, Frank—**BD**
Roach, Benjamin F.—**WD**
Roach, Harry M.—**GRV**
Roache, Fred B.—**D**
Robbins, James S.—**GRV**
Robbins, John J.—**J**
Robbins, Robert E.—**HRD**
Roberts, Donna M.—**J**
Roberts, Lowell F.—**MCRA**
Roberts, Mack—**WN**
Roberts, Jr., Lon E.—**MNT**
Robertson, George W.—**J**
Robertson, Jere C.—**CHR**
Robertson, Robert W.—**MCRA**
Robertson, Jr., David—**F**
Robertson, Jr., William C.—**F**
Robie, Carroll H.—**J**
Robinson, Garner E.—**BD**
Robinson, Gehrig M.—**J**
Robinson, Martha C.—**GRV**
Robinson, Ralph R.—**BE**
Roby, Alma L.—**J**
Rockov, Vladimir B.—**J**
Rodgers, George C.—**J**
Rodman, George H.—**MU**
Roe, Joseph E.—**HO**
Roeckel, Irene E.—**F**
Rogers, Charles R.—**BD**
Rogers, Edwin L.—**F**
Rogers, John H.—**J**
Roland, William C.—**BD**
Rollings, R. Parnell—**J**
Rollo, F. David—**J**
Romero, A. Eddie—**J**
Roney, James W.—**J**
Rosdeutscher, Harold D.—**WRN**
Rose, John F.—**J**
Rose, Stephen W.—**PUL**
Roseman, Ephraim—**J**
Rosenbaum, Harold D.—**F**
Rosenbaum, Irvin S.—**J**
Rosenberg, Kenneth R.—**J**
Rosenberg, Theodore—**MCRA**
Rosenblatt, Melvyn—**MAS**
Rosenbloom, Philip—**J**
Rosenstein, A. S.—**J**
Roser, Charles L.—**J**
Roski, Richard A.—**J**
Roskind, Joel L.—**J**
Ross, Charles D.—**CHR**
Ross, James E.—**F**
Ross, Luke D.—**J**
Ross, Paul J.—**J**
Roth, John B.—**J**
Roth, Oliver R.—**BD**
Roth, Richard L.—**J**
Routt, Ruel T.—**HRD**
Rowe, Lewis L.—**J**
Rowlett, William M.—**CHR**
Rowntree, Gradie R.—**J**
Rowntree, Marjorie—**J**
Rozelle, James F.—**CHR**
Rubel, W. Fielding—**J**
Rubin, Saul—**F**
Rubin, William S.—**J**
Rucker, Richard H.—**MCRA**
Rudd, Russell R.—**FU**
Rudwell, George H.—**J**
Rue, Nelson B.—**WRN**
Ruff, John D.—**F**
Ruktanonchai, Pairoj—**PK**
Rul-lan, Carlos D.—**J**
Rumage, William T.—**J**
Runge, Robert M.—**K**
Rush, E. N.—**J**
Rush, Willett H.—**FR**
Rush, Jr., Willett H.—**FR**
Russell, Henry T.—**K**
Russell, James E.—**F**
Russell, Stephen A.—**PUL**
Russell, William B.—**WRN**
Rust, Richard J.—**C**
Rutledge, Carl E.—**WRN**
Rutledge, Charles C.—**PER**
Rutledge, Marilyn T.—**WRN**
Ryan, James E.—**J**
Ryan, John E.—**J**
Ryan, Jr., John J.—**J**
Rye, William A.—**FLM**
Rypstra, John B.—**LRL**

S

Saam, Henry G.—**J**
Sabharwal, Kailash C.—**J**
Sabharwal, Urmil—**J**
Sachatello, Charles R.—**F**
Sadtler, Joseph E.—**J**
Saelinger, Donald A.—**C**
Saha, Sibu P.—**F**
Sahebjami, Nooshafarin—**K**
Sajadi, Kooros—**F**
Sakler, Allen M.—**J**
Salato, James C.—**AD**
Salazar, Mauricio—**J**
Saliba, Alex—**J**
Salisbury, Evelyn E.—**HRT**
Salisbury, Robert J.—**MNT**
Salmon, James L.—**HO**
Salot, Duncan G.—**MRN**
Salot, Roger D.—**J**
Salsitz, Richard B.—**J**
Salter, John J.—**HRL**
Salter, Jr., James I.—**MAD**
Sami, Abdel W.—**HRD**
Samols, Ellis—**J**
Sams, Sr., Bernard F.—**J**
Samuel, Jason T.—**HND**
Sanchez, Jose A.—**BD**
Sanderlin, Billy E.—**WT**
Sanders, Garry—**MAS**
Sanders, Marilyn M.—**D**
Sanders, Roma J.—**D**
Sanders, Ted J.—**PK**
Sandifer, Myron G.—**F**
Sandler, Nat H.—**F**
Sandlin, Everett W.—**C**
Sandman, Jr., William J.—**J**
Sandoval, Armando C.—**U**
Sanfilippo, Joseph S.—**J**
Sanford, Okey H.—**BD**
Sanford, William C.—**J**
Sani, Javad N.—**BE**
Sanneman, Everett H.—**J**
Sarasohn, Charles—**J**
Sargent, Holmes G.—**MCRA**
Sartini, John C.—**F**
Sasser, Gerald L.—**J**
Saunders, John H.—**F**
Saunders, Joseph H.—**F**
Sawhill, Fred A.—**J**
Sawhney, Kewal K.—**J**
Saxena, Suresh C.—**HRL**
Saykaly, Ronald J.—**F**
Scalzitti, Carmine J.—**J**
Schaeffer, Everett W.—**CLA**
Schafer, George W.—**J**
Schaper, Paul W.—**MRL**
Scheen, III, Samuel R.—**J**
Scheen, Jr., S. Randolph—**J**
Schell, Merrell W.—**D**
Schell, Robert H.—**D**
Schiavone, Robert P.—**J**
Schickel, Joseph—**CU**
Schikler, Kenneth N.—**J**
Schiller, Martin—**J**
Schiller, Sheldon B.—**J**
Schindler, Stephen C.—**F**
Schlossberg, Barry J.—**J**
Schmidt, Joseph E.—**F**
Schmied, William K.—**J**
Schmitt, Catherine A.—**D**
Schmitz, John P.—**BOO**
Schneck, Paul—**J**
Schneider, Glenn D.—**J**
Schneider, James J.—**K**
Schneider, Paul David—**J**
Schnitzker, William F.—**BD**
Schoen, Arthur M.—**J**
Schoo, Bernard J.—**J**
Schosser, Milo H.—**HRL**
Schramm, Theodore A.—**J**
Schrand, James R.—**BOO**
Schreiber, Donald Merle—**J**
Schrodt, Jr., George R.—**J**
Schroeder, Thomas J.—**J**
Schroer, James A.—**C**
Schuhmann, George N.—**J**
Schuler, John K.—**BOO**
Schulte, William V.—**F**
Schultz, Arthur F.—**C**
Schultz, Arthur F.—**PUL**
Schumer, Barry—**F**
Schupbach, Harold J.—**D**
Schwab, J. Matthew—**J**
Schwab, John J.—**J**
Schweitzer, Robert L.—**J**
Schworer, Philip B.—**K**
Scobee, Robert H.—**CLK**
Scofield, Edward L.—**J**
Scott, A. Thornton—**F**
Scott, Brian F.—**MRN**
Scott, Carl H.—**F**
Scott, Caroline P.—**F**
Scott, Edwin P.—**J**
Scott, Frederick A.—**HO**
Scott, Gene W.—**WT**
Scott, L. Jack—**WRN**
Scott, Ralph M.—**J**
Scott, Samuel E.—**MCL**
Scott, Samuel R.—**F**
Scott, Timothy R.—**K**
Scott, Jr., John H.—**PK**
Scroggin, Frederick R.—**GRT**
Scudder, Jr., Frank E.—**BOO**
Scullin, Jr., Daniel C.—**J**
Seabury, James C.—**MCRA**
Sears, Jane B.—**F**
Seay, Menefee—**J**
Sebastian, Wilson—**F**
Seebold, Robert J.—**J**
Seeley, Ellsworth C.—**F**
Seeley, Martha L.—**CLA**
Segnitz, Richard H.—**F**
Sehlinger, George A.—**J**
Sehra, Kankanady H.—**J**
Seifer, Fred P.—**J**
Seitz, Kent—**J**
Seligman, Jerry W.—**J**
Selke, Albert C.—**F**
Selvidge, William—**WN**
Sembillo, Avelina J.—**LET**
Senses, Robert M.—**J**
Senler, Vicdan A.—**J**
Seo, Tae-Joon—**WT**
Serey, Patrick J.—**ROW**
Serratoni, Frank T.—**J**
Settle, Charles S.—**CLD**
Settle, Lathan E.—**CLD**
Severs, Charles B.—**J**
Sewell, Frank K.—**MNT**
Sewell, III, H. Price—**BRT**
Sexter, Mark S.—**J**
Sexton, Robert E.—**ROW**
Sexton, Jr., Robert F.—**J**
Shacklette, C. B.—**J**
Shadowen, Michael W.—**J**
Shafer, Cecil W.—**J**
Shafer, Diane E.—**PK**
Shafer, James W.—**F**
Shafii, Mohammad—**J**
Shah, Manojkumar—**HO**
Shah, Mrudula J.—**BD**
Shah, Pravin—**GRP**
Shanahan, Patrick T.—**J**
Shane, Charles B.—**J**
Shanklin, J. Day—**J**
Shapiro, David—**J**
Sharman, Edward J.—**HRD**
Shaw, Charles R.—**J**
Shaw, Houston W.—**J**
Shaw, Jerry M.—**J**
Shaw, Millard R.—**HND**
Shaw, III, Robert W.—**J**
Shea, Raymond G.—**J**
Shearer, David—**BOO**
Shearer, Gary A.—**Boo**
Shearer, Glenn R.—**BL**
Shearer, Loretta T.—**J**
Shee, George T.—**J**
Sheikh, Hamid H.—**F**
Shein, Melvin—**J**
Shely, Forest F.—**TA**
Shemwell, Frank A.—**MCRA**
Shepard, Robert D.—**F**
Shepherd, Frederick P.—**J**
Shepherd, Millard A.—**PUL**
Shepherd, Norma T.—**CHR**
Sheridan, Richard T.—**BOO**
Sherman, John C.—**K**
Sheth, Mohitkumar K.—**HO**
Shidal, William D.—**MCRA**
Shields, Charles L.—**MCRA**
Shields, Christopher B.—**J**
Shier, Robert W.—**F**
Shine, Lee C.—**F**
Shipp, Charles J.—**MU**
Shipp, Darl B.—**GRT**
Shipp, David C.—**J**
Shipp, Robert S.—**TA**
Shirkey, Harry C.—**C**
Shively, Eugene H.—**TA**
Shoemaker, Donald R.—**J**
Shoff, Dennis G.—**HO**
Short, Dwight B.—**J**

ADDITIONS TO KMA ROSTER
Alphabetical by County (front side)
Alphabetical Listing of KMA Members (back side)

BARREN

Justin MacCarthy
P.O. Box 684
Glasgow, KY 42141
SU 5088 55

Rafael J. Parlade
Immediate Care Facility
Glasgow, KY 42141
P 5088 40

BELL

Albert G. Cullum
920 Dorchester Ave.
Middlesboro, KY 40965
OTO 3109 42

BOURBON

Murray D. West
2017 So. Main St.
Paris, KY 40361
GP 5088 72

BOYD

Richard W. Gardner
1737 Carter Ave.
Ashland, KY 41101
GP 3441 39

BOYLE

Bennet D. Cecil, III
201 W. Walnut
Danville, KY 40422
IM 1602 77

DAVIESS

James E. Anderson
P.O. Box 1441
Owensboro, KY 42301
SU 4106 56

Gerald G. Edds
2816 Veach Rd.
Ownesboro, KY 42301
OTO 1602 76

David E. Jones
2816 Veach Rd.
Ownesboro, KY 42301
OPH 1602 77

FAYETTE

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JOHN R. CRAMER WT

ALBERT G. CULLUM BE

JON S. DEMOS F

PHILIP A. DESIMONE F

GERALD G. EDDS D

BETTY LOU EILERS F

MARIE ANGELES ESPANOL PK

DARRELL L. FORT MCRA

RICHARD W. GARDNER BD

HERBERT Y. GILLIAM K

C. DALE GOODIN WD

DOROTHEA H. GROSS OH

CARROLL A. JANSEN K

PAUL J. JANSON K

DAVID E. JONES D

CHARLES R. LAMBERT GRP

JUSTIN MACCARTHY BAR

ARTEMIO S. MEDINA, JR. K

HENRY N. MEIERS WRN

RANDOLPH L. OFFUTT FR

RAFAEL J. PARLADE BAT

KENNETH W. PEAT MCRA

DAVID P. PRICE F

FELICISIM B. RODRIGUEZ K

BENJAMIN M. SAMPANG K

BEN SANTA-TERESA SCT

JO ANNE SEXTON F

ARTURO L. SIA K

DONNIE R. SPENCER PER

GILES L. STEPHENS FU

BRIAN W. VANDERBOEGH MCRA

ROBERT T. WEIGAND WT

MURRAY D. WEST BOU

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Shufflebarger, Harold—**CTR**
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Shulthise, Arthur J.—**J**
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Siddiqui, Fazal M.—**BE**
Sides, Paul J.—**GAR**
Siegel, Lyle P.—**HND**
Siehl, John H.—**K**
Sierra, Augustin—**HND**
Sigda, Fred—**HND**
Silanee, Hooshang—**C**
Siles, James F.—**K**
Silk, Kenneth L.—**J**
Sills, James G.—**BRK**
Silva, Rogelio A.—**HND**
Silverman, Irving—**J**
Simmons, John W.—**WN**
Simmons, Robert P.—**GRN**
Simmons, Stanley T.—**J**
Simmons, Truman D.—**HRL**
Simon, Ansel V.—**J**
Simon, Frank G.—**J**
Simpao, Valentino S.—**MU**
Simpson, Gaithel L.—**MU**
Simpson, William B.—**GRV**
Simpson, III, Jim S.—**FR**
Simpson, Jr., James H.
Simrall, James H.—**J**
Simrall, James O. H.—**J**
Singayao, Ruben P.—**FLO**
Sinha, Ranjit—**ROW**
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Sisk, Charles W.—**BL**
Sivak, George C.—**J**
Skaggs, Rodney A.—**D**
Skaggs, William K.—**SP**
Skipworth, Joseph D.—**CU**
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Slabaugh, Raymond M.—**F**
Slabaugh, Thomas K.—**F**
Slaughter, David P.—**K**
Slaughter, Joseph C.—**GRV**
Sligar, William M.—**J**
Slizofski, Walter J.—**GRV**
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Slusher, Eugene—**F**
Smiley, Gordon L.—**J**
Smiser, H. Tod—**HRS**
Smith, B. Presley—**HAN**
Smith, Barry S.—**J**
Smith, Bruce C.—**D**
Smith, Charles G.—**J**
Smith, Charles S.—**J**
Smith, Clifton—**F**
Smith, David L.—**BE**
Smith, Edward L.—**K**
Smith, Enos T.—**PUL**
Smith, Francis J.—**J**
Smith, Irvin E.—**MCRA**
Smith, James R.—**HO**
Smith, Jerry R.—**LRU**
Smith, John M.—**LE**
Smith, John R.—**J**
Smith, Keith P.—**WT**
Smith, Kenneth W.—**BE**
Smith, Langdon G.—**BE**
Smith, Mary A.—**J**
Smith, Mary Nutt—**F**
Smith, Paul R.—**LRL**
Smith, Richard D.—**MCRA**
Smith, Richard F.—**F**
Smith, Robert C.—**C**
Smith, Robert E.—**K**
Smith, Ronald E.—**J**
Smith, Samuel A.—**WRN**
Smith, Stanley E.—**J**
Smith, Stephen Z.—**J**
Smith, Tom J.—**J**
Smith, William H.—**MCRA**
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Smith, Jr., Orson P.—**J**
Smock, Jr., E. Frederic—**D**
Snider, Dixie E.—**WSH**
Snowden, Eugene L.—**CLK**
Snowden, Raymond C.—**CHR**
Snowden, Richard R.—**ES**
Snyder, Clarence E.—**CHR**
Snyder, Grace R.—**FR**
Sohi, Gurbachan S.—**J**
Sola, Venkateswara R.—**LA**
Solinger, Robert E.—**J**
Songster, Curtis L.—**HRD**
Sonne, John J.—**NL**
Sonne, Louis S.—**J**
Sopko, Robert G.—**C**
Southard, John B.—**J**
Sowards, Charles F.—**PK**
Spalding, Charles B.—**NL**
Spalding, Henry S.—**NL**
Spalding, William W.—**J**
Sparks, Clyde Cecil—**BD**
Sparrow, Athel Bert—**J**
Sparrow, John C.—**F**
Spaulding, Joe B.—**MCRA**
Spear, Richard C.—**J**
Speer, David L.—**J**
Speevack, Bernard L.—**J**
Speevack, Maher—**HRT**
Spencer, Alec—**MOR**
Spencer, Bobbie E.—**J**
Spencer, Gary G.—**CHR**
Spencer, Herbert H.—**F**
Spencer, Jr., Earle E.—**F**
Spires, Stephen M.—**MNT**
Spradlin, Marion Carroll—**PUL**
Sprague, John S.—**F**
Sprague, III, A. Davis—**HND**
Spratt, Jr., John S.—**J**
Spurlin, Geraldine W.—**MAD**
Sridharan, Marandapalli R.—**J**
St. Clair, Harvey R.—**J**
Stacy, Charles B.—**BE**
Stahmann, Fred D.—**F**
Stambaugh, Harry D.—**J**
Stambaugh, James L.—**F**
Stamer, John Paul—**J**
Stamper, William J.—**MOR**
Stamper, Jr., Daniel H.—**PK**
Stansbury, Robert A.—**J**
Stapleton, Bruce M.—**BD**
Starr, C. Clifford—**J**
Starr, Robert R.—**BAR**
Stauffer, Robert A.—**J**
Stauffer, W. Roy—**F**
Stearns, James M.—**HND**
Steele, A. Arthur—**MRN**
Steffen, Theodore N.—**J**
Stege, George C.—**J**
Stege, III, George C.—**J**
Stein, Orville J.—**PUL**
Steinberg, Sidney R.—**FR**
Steiner, R. W. Prasaad—**J**
Steinfeld, Carroll M.—**HO**
Stephens, Charles L.—**C**
Stephens, Charles O.—**BOO**
Stephens, Donald R.—**HRS**
Stephenson, Harry C.—**J**
Stephenson, Joseph E.—**BD**
Stephenson, Stuart F.—**J**
Stephenson, Thomas V.—**J**
Sternberg, Louis B.—**J**
Stetten, Maynard L.—**J**
Stevens, David B.—**F**
Stevens, Donald M.—**C**
Stevens, Eliott P.—**D**
Stevens, Virginia A.—**J**
Stevenson, Richard V.—**LET**
Stevie, John R.—**K**
Stewart, David L.—**J**
Stewart, John P.—**FR**
Stewart, Martha J.—**J**
Stewart, Robert H.—**J**
Stigall, Ben C.—**F**
Stigall, Robert W.—**BL**
Stigall, Thomas G.—**J**
Stiles, Joseph C.—**D**
Stine, Frederick A.—**C**
Stinnette, Kenneth L.—**NL**
Stites, Frank M.—**J**
Stites, Temple B.—**J**
Stith, James B.—**F**
Stivers, James R.—**J**
Stober, John G.—**J**
Stockwell, John R.—**J**
Stodghill, William B.—**J**
Stodghill, William J.—**MCRA**
Stoeckinger, John M.—**F**
Stokes, Joseph D.—**MU**
Stokes, Jr., Lowell L.—**J**
Stoler, Barry S.—**J**
Stoll, Jr., Walter W.—**F**
Stoltzfus, Richard G.—**HRL**
Stone, Howard—**J**
Stone, James L.—**F**
Stone, Thomas B.—**GRV**
Storey, Benjamin B.—**F**
Storrow, Hugh A.—**F**
Stoutt, Jr., Glenn R.—**J**
Strand, Karl H.—**PUL**
Stratman, Edward J.—**C**
Straub, James G.—**F**
Strawn, Robert L.—**K**
Strode, Robert E.—**CLK**
Strunk, Danny J.—**PUL**
Stryker, Allan K.—**HO**
Stryker, Winfield—**MCRA**
Stufflebam, Bradley C.—**HO**
Stumbo, Warren G.—**FR**
Sturgeon, Gerald F.—**J**
Stuteville, James H.—**HRD**
Sublett, Daniel V.—**F**
Sublett, James L.—**J**
Sukhaphadhana, Chuchai—**BE**
Sullivan, Clarence F.—**MCRA**
Summay, Dillard R.—**J**
Sumner, Robert L.—**J**
Sundaram, Raghu R.—**FLO**
Suruda, Anthony J.—**F**
Sutherland, J. Patrick—**J**
Sutherland, John W.—**FLO**
Sutkamp, Jerry C.—**C**
Swan, David S.—**F**
Swartz, William T.—**F**
Sweeney, Garnett J.—**CSY**
Sweeney, George W.—**CSY**
Sweeney, Jr., Garnett J.—**F**
Sweitzer, Stephen J.—**J**
Swikert, Donald J.—**K**
Swikert, Nancy C.—**K**

T

Tackett, Laddie L.—**F**
Tackett, Robert N.—**BD**
Tagher, Paul L.—**BOO**
Tak, Abdul Rehman—**J**
Talbott, C. Maximilian—**J**
Talley, Nathaniel H.—**CLD**
Tan, Kok Liong Y. (David)—**HAN**
Tandon, Shashi K.—**CAL**
Tanner, George R.—**C**
Taormina, Vincent—**F**
Tarkington, Charles N.—**F**
Tate, Robert C.—**J**
Taulbee, Arnold L.—**LE**
Taustine, Lloyd R.—**J**
Taylor, Ben H.—**MCRA**
Taylor, Cecil E.—**CLA**
Taylor, Charles R.—**FR**
Taylor, Charles W.—**F**
Taylor, Ellis R.—**F**
Taylor, Frank H.—**HO**
Taylor, Paul M.—**HO**
Taylor, Ronald E.—**D**
Taylor, Thomas R.—**HRD**
Tcheng, John T.—**C**
Temes, Gerald D.—**J**
Temple, William J.—**K**
Templeton, III, William C.—**J**
Terhune, J. Nicholas—**CHR**
Terry, Charles E.—**ES**
Theiss, Jr., Chester B.—**J**
Thind, Gurdarshan S.—**J**
Thind, Rajinder K.—**J**
Thomas, B. Preston—**J**
Thomas, David P.—**MCRA**
Thomas, Donald M.—**J**
Thomas, J. Kent—**J**
Thomas, Joan E.—**J**
Thomas, John W.—**J**
Thomas, Ralph G.—**GRY**
Thomas, Sr., George W.—**CHR**
Thompson, Elvis R.—**PK**
Thompson, John S.—**F**
Thompson, Joseph L.—**J**
Thompson, Leroy E.—**J**
Thompson, Malcom D.—**J**
Thompson, Morris H.—**J**
Thompson, Oscar W.—**PK**
Thompson, Robert B.—**F**
Thompson, Ronald H.—**WRN**
Thompson, Jr., Kearns R.—**F**
Thompson, Jr., Walter L.—**J**
Thomsen, Andreas E. T.—**MNR**
Threlkeld, Thomas G.—**LO**
Thurber, Donald B.—**FR**
Thurman, David H.—**J**
Thurman, Peter L.—**J**
Tibbs, Philip A.—**F**
Tidal, Abubakar H.—**LET**
Tigas, Lourente B.—**GRP**
Tillett, Robert S.—**J**
Tillett, Jr., Robert S.—**J**
Timmerman, Raymond J.—**C**
Tisdall, Ouida F.—**F**
Tittel, Jr., Paul W.—**J**
Tobias, Carmelita R.—**J**
Tobias, Regulo J.—**J**
Tobin, Daniel A.—**J**
Tobin, Stuart—**MAD**
Tobin, II, Gordon R.—**J**
Todd, Edward P.—**F**
Tomlin, Jerrold E.—**J**
Tomlinson, John C.—**J**
Tonkin, Ina D.—**J**
Toomey, Lawrence O.—**WRN**
Torres, Jose C.—**J**
Touma, Ralph I.—**BD**
Townsend, Hastel L.—**J**
Townsend, William M.—**PND**
Trapp, Claude W.—**F**
Traughber, Sam H.—**CHR**
Travis, Russell L.—**F**
Traylor, Carroll W.—**MRL**
Trevey, John E.—**F**
Trimbur, Thomas R.—**J**
Trommler, Lloyd—**J**
Trostel, Manfred E.—**F**
Trover, Faull S.—**HO**
Trover, Loman C.—**HO**
Trover, Philip Loman C.—**HO**
Tsai, Tsu-min—**J**
Tucker, Thomas T.—**F**
Tufts, Kenneth C.—**F**
Tuong, Chuong V.—**J**
Turner, Bobby—**WT**
Turner, Emmauel C.—**BRT**
Turner, John W.—**JNS**
Turner, Phillip W.—**WRN**
Turner, Robert E.—**J**
Turns, Calvin N.—**CHR**
Turns, Danielle M.—**J**

Tutt, Henry P.—**F**
Tuttle, Fred T.—**SCT**
Tuttle, Jr., John P.—**F**
Twyman, Don G.—**F**
Twyman, Wilbert M.—**J**
Tyler, Lucy S.—**J**
Tyler, Terry W.—**WRN**
Tyler, III, William L.—**D**
Tyner, III, Mack—**HO**
Tyson, J. Wendell—**J**

U

Uhde, George I.—**J**
Uhron, William G.—**BD**
Ulfe, Mario V.—**J**
Ulfe, Martha B.—**J**
Underwood, William L.—**F**
Unnikrishnan, E. W.—**BD**
Upton, Roy O.—**J**
Urbach, Stuart—**J**
Urton, John W.—**J**

V

Valdez, Juan—**LET**
Valera, Erlindo G.—**PK**
Van Arsdall, Jr., C. B.—**MER**
Van Arsdall, Sr., T. C.—**MER**
Van Bussum, R. Ritchie—**F**
Van Dermark, Jonathan Gay—**K**
Van Hooser, Curtis W.—**HO**
Van Meter, Jr., Jesse O.—**F**
Van Nagell, John R.—**F**
Van Nostrand, Leslie—**J**
Van Vooren, Albert—**J**
Vanbakel, Adrian B.—**J**
Vance, Joseph M.—**CHR**
Vandertoll, Donald J.—**J**
Vandiviere, H. Mac—**F**
VanGeloven, F. E.—**HRL**
Vannier, Frank P.—**J**
Varga, Donald T.—**J**
Vaughn, Darrel L.—**U**
Vaught, Stephen K.—**HRD**
Veal, III, Molloy G.—**J**
Veal, Jr., Molly G.—**HND**
Venhoff, George D.—**J**
Verdi, Gerald D.—**J**
Vermillion, Margaret B.—**J**
Vesper, Albert J.—**K**
Vesper, III, Albert J.—**K**
Veurink, Charles H.—**MAD**
Vieillard, Louis F.—**HRL**
Vigh, Alexander L.—**F**
Vijayaraghavan, Melap. S.—**HO**
Viles, Henry—**GRV**
Villarosa, Irene Y.—**CHR**
Vinson, III, Carey T.—**F**
Vire, Clarence G.—**CAL**
Vogt, Rudolph F.—**J**
Volk, Donna M.—**J**
Von Roenn, Kenneth F.—**J**
VonderHaar, William P.—**J**
Vongvises, Manosh—**PK**
Vontobel, Harry P.M.—**HO**
Vora, Raju N.—**KX**
Voyles, Harry E.—**J**
Vyas, Thokur—**J**

W

Waflart, Theodore—**J**
Wagemaker, Herbert—**J**
Wagner, Alfred T.—**J**
Wagner, Charles E.—**J**
Wagner, Jr., William H.—**F**
Wahl, Robert R.—**J**
Wainscott, Barry—**SH**
Wakefield, Donald L.—**F**
Wald, Herbert—**J**
Waldemayer, Carl A.—**PND**
Waldridge, Ronald E.—**SH**
Waldrop, Claude C.—**GRT**
Walker, Candace L.—**J**
Walker, James D.—**J**
Walker, Jesse L.—**BE**
Walker, Jon D.—**J**
Wallace, David W.—**HO**
Wallace, Gary R.—**F**
Wallace, Jesse—**MCRA**
Wallace, Leonard E.—**F**
Wallace, Virginia—**ES**
Wallace, Jr., Carmel—**WT**
Wallace, Jr., Thomas S.—**J**
Waller, William M.—**BOO**
Walls, John H.—**J**
Walsh, David W.—**PND**
Walsh, John W.—**F**
Walsh, Maurice R.—**K**
Walsh, Thomas P.—**J**
Walsh, William V.—**F**
Walstad, Paul M.—**HRL**
Walters, George R.—**HO**
Walton, Jr., William W.—**F**
Waltrip, William E.—**F**
Wan, Richard T.—**BUT**
Ward, William G.—**D**
Ward, Jr., Will W.—**J**
Ware, Donald L.—**J**
Warfield, Robert B.—**F**
Warren, A. Samuel—**F**
Warren, Bryan P.—**D**
Warren, Walter—**WRN**
Warrick, Jr., Edward—**J**
Warrier, Rajkumar K.—**BD**
Wash, Lewis E.—**AN**
Washburn, Burton A.—**MCRA**
Wasser, Lawrence J.—**J**
Wesson, Anne A.—**LES**
Waterman, Norton G.—**J**
Wathen, Charles B.—**J**
Wathen, Ronald L.—**J**
Watkins, David A.—**HND**
Watkins, David R.—**J**
Watkins, William T.—**PUL**
Watson, Ben E.—**F**
Watson, Charles T.—**BD**
Watson, J. Roy—**J**
Watson, Thomas R.—**J**
Wattanawanakul, Somsak—**BE**
Watts, Gene T.—**KT**
Watts, John—**J**
Wayne, III, Peter H.—**J**
Weakley, Lolita S.—**J**
Weakley, Samuel D.—**J**
Weakley-Jones, Barbara—**J**
Weaver, Edgar S.—**CAR**
Webb, Charles A.—**F**
Webb, George E.—**J**
Webber, Frederick N.—**J**
Weber, Melvin J.—**K**
Weber, Robert D.—**K**
Weber, William L.—**J**
Weddle, Richard H.—**PUL**
Weddle, Ronald D.—**NL**
Wee, Gilberto O.—**HO**
Weeter, John M.—**J**
Weiner, Leonard J.—**J**
Weinstein, Gary S.—**J**
Weisert, Roderick F.—**WT**
Weiss, Jeffrey A.—**J**
Weiss, Robert M.—**J**
Weiss, Jr., Morris M.—**J**
Weisskopf, Bernard—**J**
Weitzel, William D.—**F**
Welch, James P.—**J**
Weldon, Thomas A.—**K**
Wellman, Paul K.—**J**
Wellman, Robert G.—**J**
Wells, Billy H.—**WT**
Wells, Francis B.—**F**
Wells, Henry A.—**K**
Wells, Paul O.—**HRL**
Wells, Raymond D.—**MRT**
Wells, Sharon E.—**F**
Wells, Tom—**BAR**
Wells, William C.—**BAR**
Welsh, Donald V.—**J**
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Wesley, Lewis E.—**CSY**
West, Edwin H.—**J**
West, Harold F.—**WRN**
West, Wilk O.—**F**
Westerfield, Lowell K.—**D**
Westerman, James K.—**BOO**
Wetzelberger, Graig C.—**J**
Wever, Richard J.—**BOU**
Whalen, Daniel A.—**C**
Whalen, Jr., Frank—**MER**
Wham, Richard A.—**HND**
Whayne, Jr., Thomas F.—**F**
Whayne, Sr., Tom F.—**F**
Wheat, Myron W.—**J**
Wheatley, Jr., John W.—**J**
Wheeler, Betty S.—**F**
Wheeler, Chalmer S.—**J**
Wheeler, Gary E.—**J**
Wheeler, Ira F.—**CLA**
Wheeler, Max E.—**BD**
Wheeler, Stanley D.—**J**
Wheeler, William B.—**F**
Wheeler, William G.—**F**
Wheeler, II, W. G.—**MCRA**
Wheeler, Jr., Carl L.—**F**
Whelan, Jr., Joseph G.—**J**
White, David—**FLO**
White, Janet M.—**MNT**
White, Richard H.—**FU**
White, III, William—**J**
White, Jr., A. Franklin—**J**
White, Jr., George H.—**J**
Whitehead, Ralph E.—**J**
Whitehouse, A. J.—**F**
Whiteside, George P.—**BAR**
Whiteside, Jim H.—**BAR**
Whitt, John J.—**J**
Widmer, Nelson D.—**J**
Wiegert, H. Thomas—**F**
Wieman, Thomas—**TA**
Wier, Kenneth R.—**HRL**
Wiesel, Carl—**F**
Wiesemann, Richard—**WRN**
Wigginton, Larry S.—**D**
Wight, Frank H.—**D**
Wightman, E. Thomas—**F**
Wijangco, Isabelita P.—**J**
Wilber, Robert H.—**MRN**
Wilbur, Cornelia B.—**F**
Wilder, T. Paul—**HND**
Wilhite, Hugh H.—**MCL**
Wilhite, James G.—**F**
Wilhoit, Jack C.—**J**
Wilkerson, Shirley Ann—**J**
Wilkes, James C.—**F**
Wilkes, Marcus B.—**ED**
Willard, John H.—**HRL**
Williams, Cordell H.—**PER**
Williams, Granville B.—**PUL**
Williams, James D.—**MAS**
Williams, Paul F.—**J**
Williams, Rob—**CAL**
Williams, Walter F.—**BD**
Williams, Wayne E.—**GRV**
Williamson, James F.—**BD**
Willner, Alan—**J**
Willoughby, James O.—**WRN**
Wilson, Charles F.—**PK**
Wilson, Donald R.—**MAS**
Wilson, Emery A.—**F**
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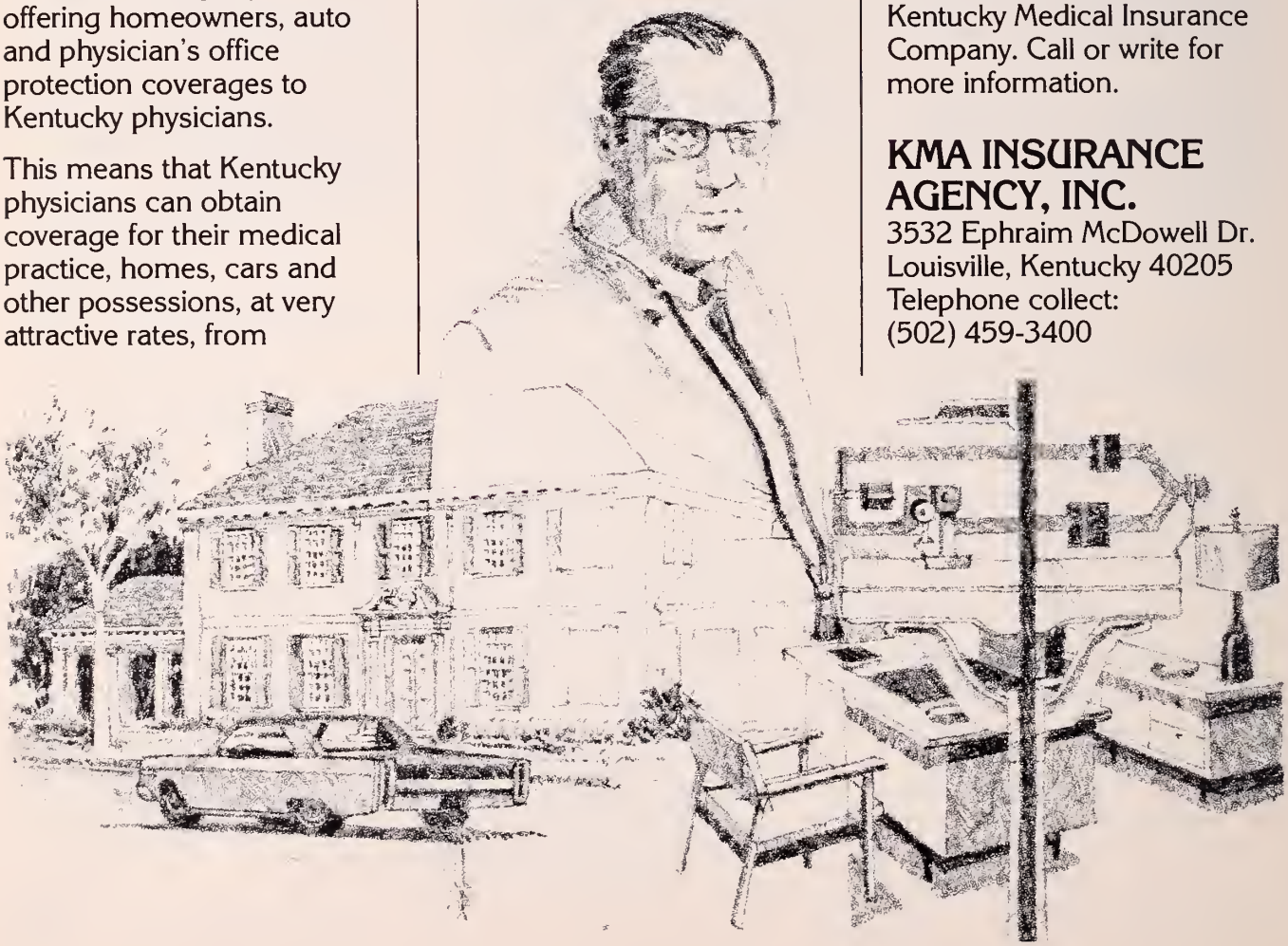
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JULY

7-8 Wayne State University Symposium on Cerebral Resuscitation, Westin Hotel, Detroit. For information: (313) 577-1180

27-31 Fifth Annual Symposium on Contemporary Clinical Neurology, Palmetto Dunes Hyatt Resort, Hilton Head Island, SC

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

SEPTEMBER

10-11 Diseases of the Ear, Bethesda Hospital and Deaconess Association, Stouffer's Cincinnati Towers, 141 W. Sixth Street, Cincinnati, OH

13-15 The National Kidney Foundation, The U.S. Department of Health & Human Services, & the International Life Sciences Institute Symposium, "Nutrition and Blood Pressure Control," Stouffer's National Center Hotel, Arlington, VA

13-16 1982 Annual Meeting, United States Section International College of Surgeons, "International Surgical Frontiers," Resorts International Hotel, Atlantic City, New Jersey

21-23 KMA Annual Meeting, Hyatt Regency, Lexington, KY

24-26 Regional Postgraduate Meeting. Marriott Hotel, New Orleans, LA. Southern Medical Association. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

9-17 The Seventh Annual International Body Imaging Conference, Sheraton Royal Waikoloa Hotel, Kona, Hawaii

11-14 International Continuing Medical Education (CME) Meeting, Honolulu, Hawaii

29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

30-2 76th Annual Scientific Assembly, a conjoint meeting of the Southern Medical Association and the Medical Association of Georgia, Peachtree Plaza Hotel and Georgia World Congress Center, Atlanta. Contact: Southern Medical Association, PO Box 2446, Birmingham, AL 35201

NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

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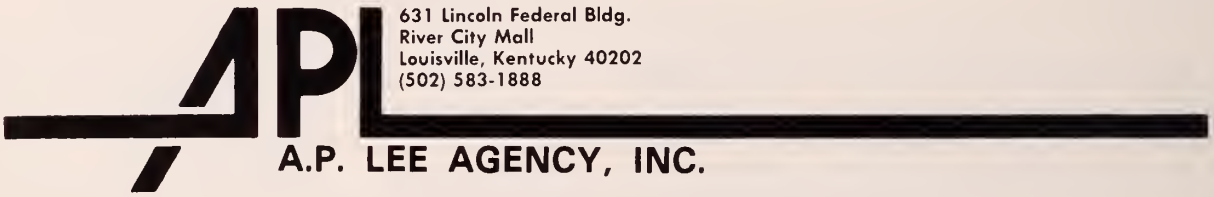
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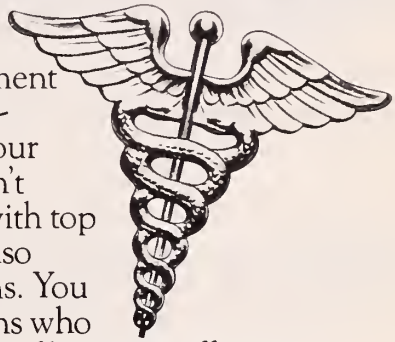
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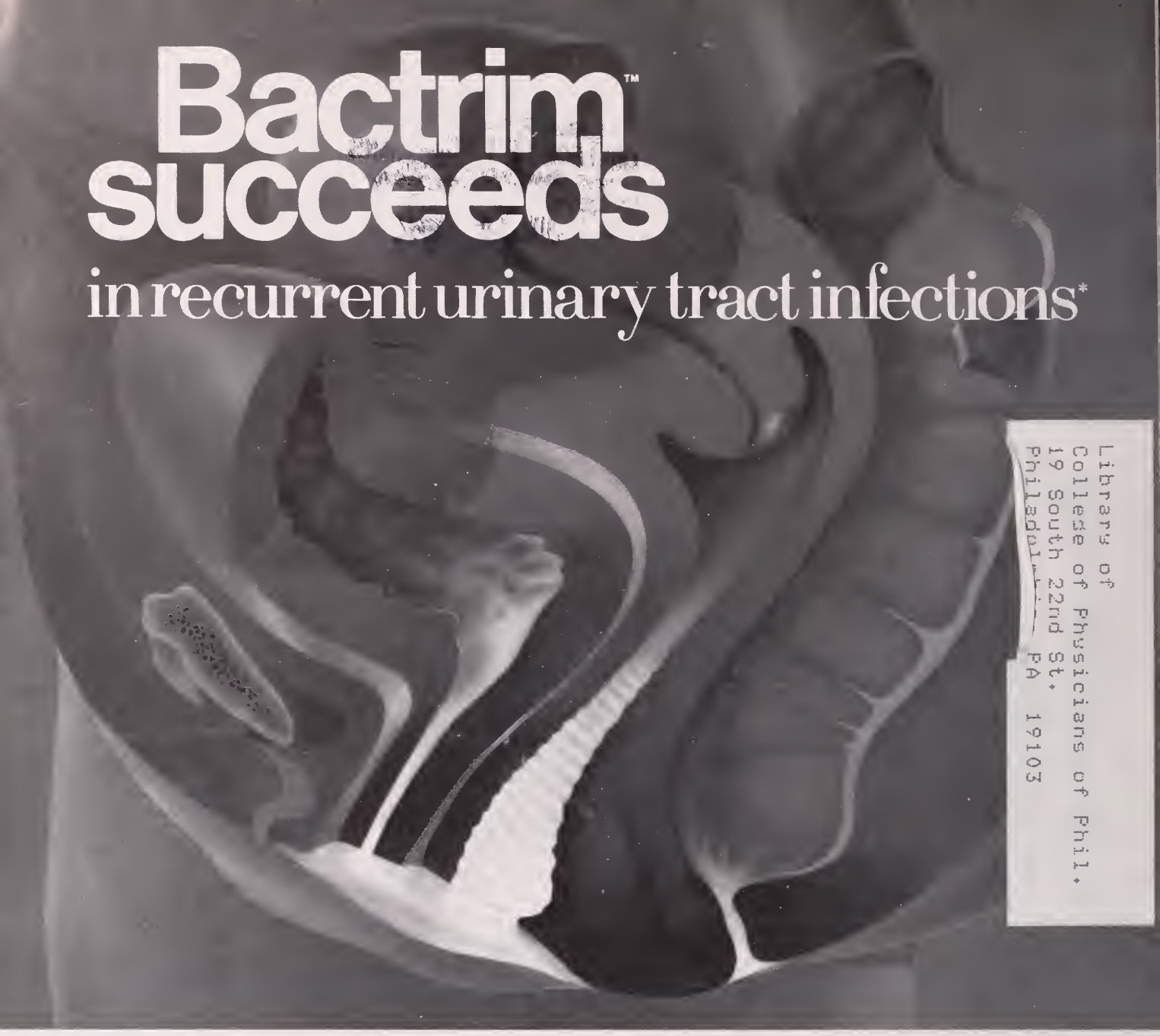
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faster relief of diarrhea than with ampicillin[2]

BACTRIM™ (trimethoprim and sulfamethoxazole/Roche)
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Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
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Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.
Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
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Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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August 1982 Volume 80 Number 8



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1982 KMA ANNUAL MEETING

Pinworms work the night shift



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Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration

Children and Adults Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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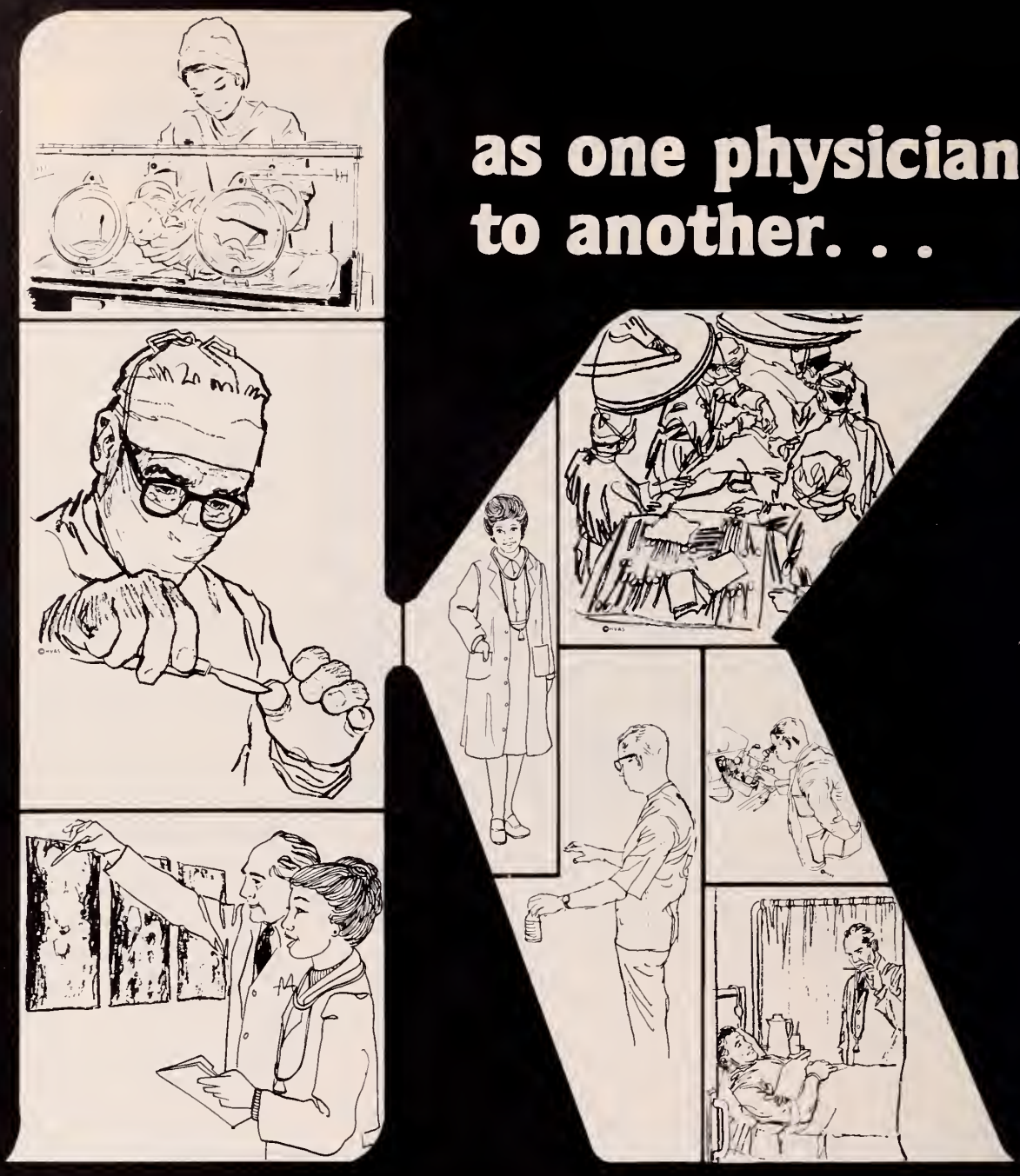
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headache
vague aches and pains
sadness
psychic and somatic anxiety



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looking out from the human eye
as conceived in a schematic model.

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Limbitrol given once daily h.s. may be the best approach

Many patients respond readily to a single bedtime dase of Limbitrol, a convenient schedule that may enhance compliance and helps relieve the insomnia associated with anxious depression. Limbitrol also offers a chaice of ather regimens: t.i.d., ar a divided dase with the larger portian h.s. In all cases, caution patients about the combined effects with alcahol or ather CNS depressants and about activities requiring complete mental alertness, such as driving ar aperating machinery.

in moderate depression and anxiety

Limbitrol® 5-12.5 10-25

Tablets 5-12.5 each contoining 5 mg chlordiozepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)
Tablets 10-25 each containing 10 mg chlordiozepoxide and 25 mg amitriptyline (as the hydrochloride salt)

Specific therapy with h.s. dosage convenience

Please see summary of complete product information on following page.

LIMBITROL® TABLETS Tranquilizer—Antidepressant
Before prescribing, please consult complete product information, a summary of which follows:
Indications: Relief of moderate to severe depression associated with moderate to severe anxiety
Contraindications: Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.
Warnings: Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).
***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**
Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).
Precautions: Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. Concomitant use with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.
Adverse Reactions: Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.
The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs:
Cardiovascular: Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.
Psychiatric: Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.
Neurologic: Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.
Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
Other: Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.
Overdosage: Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. I.V. administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.
Dosage: Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single *h.s.* dose may suffice for some patients. Lower dosages are recommended for the elderly.
Limbitrol 10-25, initial dosage of three to four tablets daily in divided doses, increased to six tablets or decreased to two tablets daily as required.
Limbitrol 5-12.5, initial dosage of three to four tablets daily in divided doses, for patients who do not tolerate higher doses.
How Supplied: White, film-coated tablets, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) and blue, film-coated tablets, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500, Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10, Prescription Paks of 50.

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PRESIDENT'S PAGE

Twentieth Anniversary

YOUR Kentucky Educational Medical Political Action Committee (KEMPAC) was organized in January 1962. It was founded to give Kentucky physicians an **effective** means of political action. The experience has been impressive. Bi-partisan political action is a necessary political reality.

Recent polls taken indicate the American public endorses the traditions of voluntary campaign financing and opposes the use of public funding for Congressional campaigns. The fact that there were less than 10 political action groups in the Sixties, and 250 at this time, substantiates the belief that the united effort within the various groups is the preferred form of political action.

By working together through KEMPAC and AMPAC, our profession as a group can become involved in a **united** effort to elect candidates who will give Medicine's position a fair hearing.

Membership over the past two decades has increased steadily. In 1962, we had 678 members with dues of $13,560.00—1981, 924 members with dues of $53,022.00. Sustaining membership is up 30% from last year. Now, 93% of your KMA Board of Trustees and your KEMPAC Board of Directors are KEMPAC members. We expect this to be 100% by the time of our September meeting and have the same plan for all KMA Delegates.

Every KMA member physician has been solicited to participate in KMA's political arm and vigorous promotion is continuing to reach the 2,000 membership goal for 1982. Being concerned about the free enterprise system and having a voice in promoting and improving government is why **all** should join their colleagues in an effective political action body.

As you already know from previous KMA publications this year, KMA's Legislative Committee and our excellent staff, acting in your behalf, were successful in dealing with the legislators regarding bills of special concern to our profession in the delivery of health care for Kentuckians. Much thanks is due all concerned, however, efforts must be increased to insure future success.

In 1962, KEMPAC contributed $3,350.00 to candidates for the Kentucky General Assembly. During 1982, almost $36,000.00 was contributed through Physician-Candidate Support Committees of KEMPAC to candidates for the Kentucky General Assembly, in addition to individual physician's contributions. I hope you had a part in this political action.

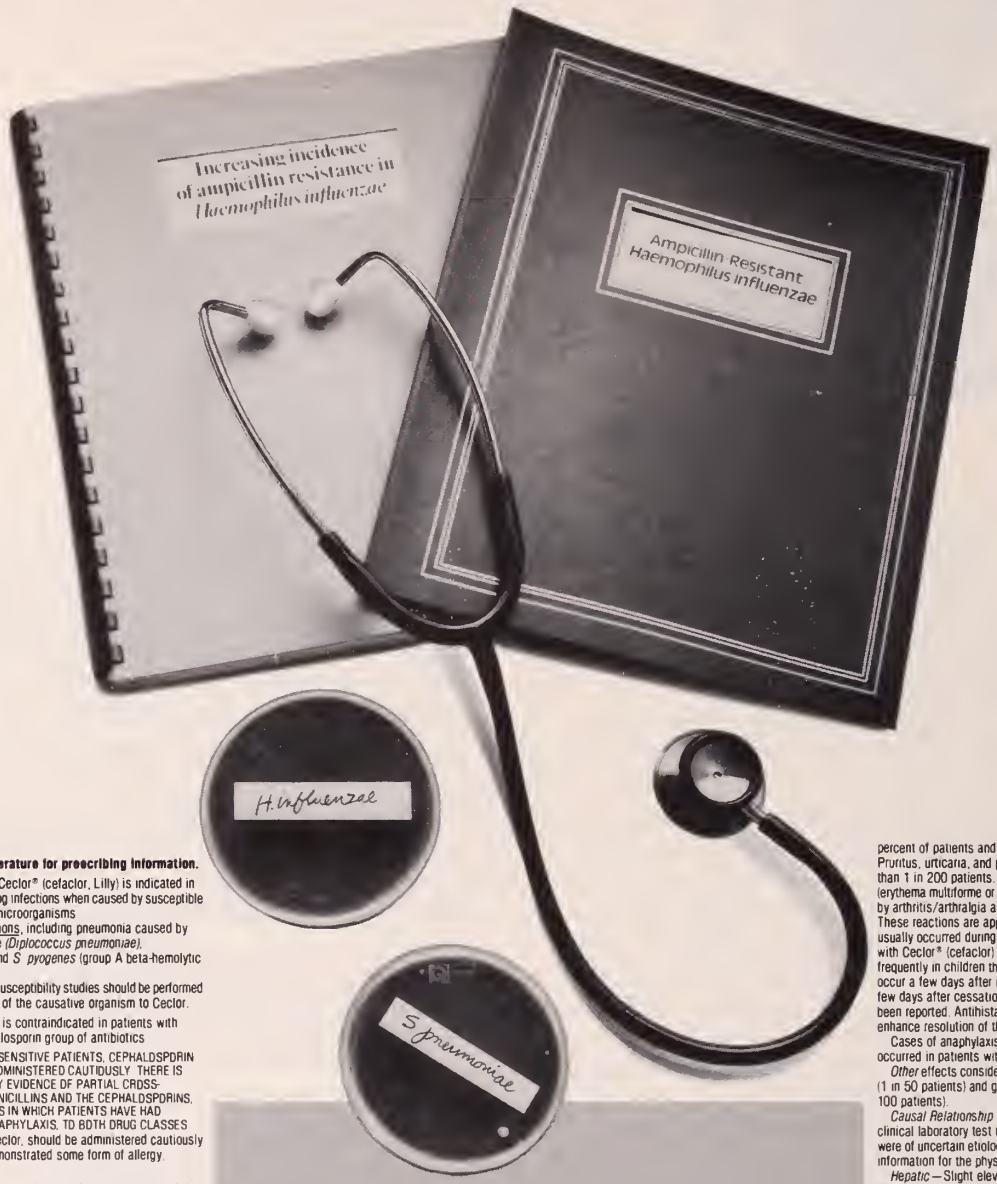
Federal campaign regulations have been revised to once again permit KEMPAC/AMPAC involvement of Auxiliary members. Auxiliary members as "partners in politics" of the medical profession in Kentucky are one of Medicine's most valuable assets. We welcome Mrs. John W. Harrison (Joan) as the Auxiliary KEMPAC Chairman this year. Four members of our Auxiliary, two of each major party, serve on our KEMPAC Board and play a major role.

Let me encourage you also to be as active as time will allow at the grass roots level. Make plans now to attend our 20th anniversary celebration of KEMPAC on Monday evening, September 20, 1982, at the Hyatt-Regency, Lexington, Kentucky. Be sure to ask your legislator, there at home, to join you. If he or she can't come, ask a member or two of his or her staff to attend. Watch future publications for more interesting details regarding this significant gathering.

Make our 20th Anniversary year your KEMPAC year!

Sam Weakley, M. D.
KMA Vice President

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci)

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [10028IR]

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

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SCIENTIFIC

Therapeutic Angiographic Renal Artery Embolization

WILLIAM T. DANIEL, B.S. and JAMES I. HARTY, M.D.

Many interventional radiographic procedures are currently being used to aid in the management of patients with renal disease. Dramatic results are being obtained with the use of embolization of renal arteries in patients with renal neoplasms. This paper presents a review of the current literature on renal artery embolization and considers the indications for this procedure, the materials and methods used today, and possible complications.

LALLI[1] first experimented with embolization of canine kidney and lung tissue in 1969. He recognized many of the complications that remain with us today, such as migration of embolic material into an unwanted vessel. The application of embolization to humans began in 1971 when Lang[2] used radioactive gold seeds to infarct hypernephromas. This marked the beginning of the increasing use of embolization in the treatment of patients with renal neoplasms. The first study of the use of embolization in cancer patients occurred in 1973, when Almgard[3] reported 19 cases of embolization for renal adenocarcinoma.

Angiographic embolization is now frequently used in the symptomatic, terminally ill renal cancer patient who is not a candidate for surgery. Significant palliative effects can be achieved with this procedure, and it has been shown to reduce the life-threatening hematuria and to control symptoms of pain with less morbidity and mortality than would be expected from a surgical treatment such as nephrectomy. The postinfarction syndrome, seen frequently in embolizations, usually can be tolerated by the terminally ill patient. Several examples of the palliative use of selective embolization in the cancer patient are reported in the literature.

Bruneton[4] reported two patients who, following a nephrectomy for renal cell carcinoma, presented with metastasis to the opposite kidney and symptoms of hematuria and pain that were refractory to medical management. Therapeutic selective embolization was performed on the remaining kidney, with alleviation of symptoms of hematuria and pain, and the preservation of renal function. This avoided a second nephrectomy and the need for dialysis. This approach is also advocated by Walther and associates,[5] who reported two cases in which embolization was used in the palliation of symptoms in patients with lung cancer which had metastasized to the kidney. Again, the patients presented with pain and hematuria. Walther based his use of embolization on the fact that only 10% of cancer patients with renal involvement are alive after one year, and their hematuria and pain can be

From the Department of Surgery and the Section of Urology, University of Louisville School of Medicine, Louisville, Kentucky 40202.

effectively controlled by the embolization procedure.

Embolization also has a role in selected patients who are suitable surgical candidates. In a study by Singsaas,[6] 30 patients who were to undergo radical nephrectomy were evaluated; 15 patients, who had preoperative embolization, were compared with 15 patients who were not embolized. Singsaas found that operating time was reduced by approximately 55 minutes; blood loss was decreased; and the need for blood replacement was reduced 50%. The reasons for the above results are varied. It is known that if the renal artery is embolized prior to nephrectomy, edema in the tissue plains results. This tends to make dissection at surgery easier. The edema is more pronounced and, therefore, helpful to the surgeon if embolization is effected approximately 48 hours before nephrectomy. In a study of 10 patients who were embolized before nephrectomy, the surgeon was able to ligate the renal vein prior to the ligation of the renal artery in three patients.[7] This has the potential in the cancer patient to decrease the hematogenous seeding of the cancer cells from manipulation of the kidney during the nephrectomy. Preoperative embolization also will reduce the size of the tumor and will make the resection easier. Danis and associates[8] reported on two cases of Wilms' tumor that were surgically unresectable because of size and vascularity. Embolization of the renal artery decreased the tumor size and vascularity and the kidneys were later resected. Hypercalcemia, a rare complication in patients with renal cell carcinoma, has recently been described by Jacobs.[9] The patient's tumor was producing parathyroid hormone and thus causing hypercalcemia. Jacobs' success in controlling the electrolyte imbalance by embolization of the cancerous kidney suggests that there is potential for the use of embolization in many renal-related complications of cancer.

An important aspect of the embolization procedure is the effect it may have on the patient's immune system. It has been proposed that the infarction process gives the patient a large load of antigenic nonviable tumor cells. This may directly help stimulate host anti-tumor immunity.[10] It has been shown that patients do have cellular and humoral response to malignant renal cells; therefore, the tumor is immunogenic. Large tumor bulk as well as the conventional methods of treatment (radiation and chemotherapy) tend to suppress the immune system. Therefore, embolization appears to have potential in this respect. The maximum immunologic response is achieved after seven days. This period of time is longer than the usual time between embolization and the following nephrectomy. Even

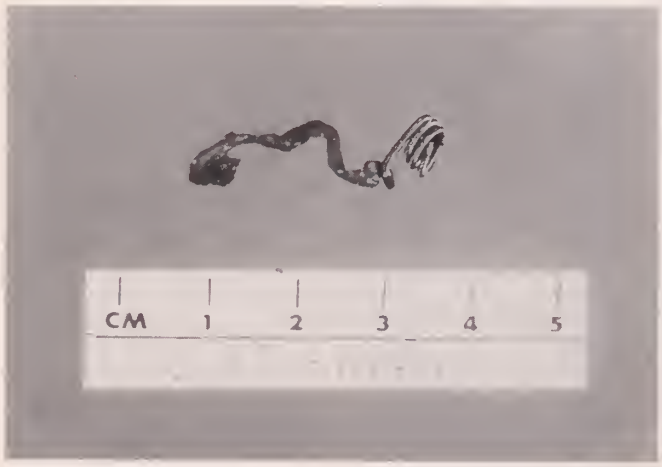


Fig. 1: Gianturco coil.



Fig. 2: Preembolization arteriogram showing upper pole tumor (arrows).

with shorter time, spontaneous regression of metastatic renal cell carcinoma after preoperative embolization and nephrectomy has been reported.[11] In the case reported by Mohr, the patient received no chemotherapy or radiation, but x-rays showed evidence of decreased size of pulmonary metastasis. Mohr attributes this phenomenon to the immunologic aspect of the embolization procedure. Although there are further reports of regression of metastatic cancer, these cases were treated with chemotherapy in addition to embolization and nephrectomy.[10] Further research is needed to evaluate the true immunologic benefit of embolization.

The concept of embolization with chemotherapeutic agents is now referred to as chemoembolization. In this procedure chemotherapeutic agents, along with embolization material, are both introduced through the angiographic catheter. The goal is to concentrate the anticancer agent in the area of the tumor, thus decreasing its systemic toxicity. In a recent study done in Japan by Kato and associates,[12] Mitomycin C microcapsules, which act as emboli, were tested, as well as chemotherapeutic agents, in patients with renal cell carcinoma. A control group of 43 patients were also treated and closely followed with computerized tomographic scans, repeat angiography, and histology studies. In the patients who received chemoembolization with microspheres, 68% had a marked decrease in tumor size shown by CT scan, 33% had marked angiographic changes, and 68% had marked histologic changes. There was also a marked decrease in the level of chemotherapeutic agents in the peripheral blood when microcapsules were used.

Transcatheter embolization with radioactive particles is also being investigated as a method of treatment for renal cell cancer. However, numerous technical problems need to be resolved before this will become a therapeutic modality offered to cancer patients.



Fig. 3: Preembolization arteriogram showing occlusion with Gianturco coil.



Fig. 4: X-ray of surgical specimen.



Fig. 5: Preoperative abdominal film showing Gianturco coil.

A variety of materials and methods have been used to embolize the renal artery. Early materials used in embolization procedures were polystyrene microspheres and sephadex particles, a modified dextran that will swell in the presence of moisture. These were the materials used by Lalli[1] in his first studies in dogs. The problems with these early materials were that the polystyrene microspheres were so lightweight that they refluxed out of the vessel in which they were injected and that both agents were radiolucent; therefore, the location of emboli could not be determined by x-ray studies. Other agents included muscle, autogenous blood clot, Gelfoam®, isobutyl-2-cyanoacrylate,[13] ferromagnetic silicone microspheres,[14] barium and the Gianturco steel coil.[15]

Today the steel coil and wool vascular embolization device designed by Gianturco (Fig. 1) appears to be the most effective in producing permanent vascular occlusion. Steel made the device radiopaque so that the location could be determined, and the steel spring coil made the device less likely to dislodge from the vessel. The wool strands were excellent for producing thrombus formation but they acted as a very potent irritant to the vessel wall and set up an intense vascular reaction.[16] This chronic vascular reaction caused the normal structural components of the artery to be replaced with fibrous connective tissue. Struthers[17] reported a patient who developed a renal artery aneurysm at the site of the steel and wool coil as the result of chronic inflammation. The wool has been replaced with silk and Ivalon® because these materials are less irritating to the vessel wall. In studies done in swine, it was found that Ivalon, a polyvinyl alcohol derivative, was the most histocompatible and produced the least inflammatory reaction.[16] While silk was found to be more compatible than wool, it was not as compatible as the Ivalon. Used alone, the steel coil did not produce occlusion, nor did it produce an intense vascular response. Therefore, for complete and permanent occlusion the materials should include the steel coil with Ivalon, or possibly silk strands. Many other materials can be used if permanent occlusion is not required. The shortest duration of occlusion is achieved when autologous clot is used. Here the patient's own blood is allowed to clot and is injected through the catheter. This infarction will last for hours to days before the body breaks down the clot. Because of its short duration of action, the clot is used mainly for control of hemorrhage and is not used in the cancer patient. Longer action is achieved when subcutaneous tissue or muscle is used as the embolic material, but these materials are not often used in cancer patients for two reasons. First, a surgical incision is required to obtain the material and, second, the body will reabsorb the material in a few weeks. The material most commonly used today is Gelfoam, which is used as a hemostatic agent in surgical procedures. It is readily obtainable and has a duration of action of weeks to months. It is usually cut into small pieces, loaded into a syringe and injected via the catheter into the renal artery. The Gelfoam is distributed to the smaller vessels in the kidney, thus occluding the peripheral vascular beds. The completeness of the occlusion is determined by the number of peripheral renal arteries that contain the Gelfoam. Like wool and silk there is also a vascular reaction to the Gelfoam. The inflammatory response consists of the formation of polymorphonuclear leukocytes in the cell layers of the arterial wall, in the areas immediately around the artery, and even within the Gelfoam itself.[10] This usually does not cause any problems because the Gelfoam injection is followed by insertion of a steel coil device that reduces the pressure proximally; thus, the vascular reaction to the foam does not lead to aneurysm.

Embolic material that also has chemotherapeutic properties is an exciting new aspect of embolization. The future use of radioactive particles as embolic material should add further diversity to the field. These methods will need further evaluation before they will be used commonly.

It is difficult to develop a standard means of evaluating the results of the various techniques of embolization. One of the least invasive methods of evaluation would be to perform a perfusion scan of the kidney to determine the effectiveness of the embolization procedure. This, however, would not offer sufficient detail and, therefore, probably would not be sensitive enough to evaluate the various procedures used today. Repeat angiography after the coil is placed offers good anatomical detail of the vasculature pre- and postembolization (Figs. 2 & 3); this, along with comparison of the surgical specimen after nephrectomy is performed, probably offers the most accurate information of the effectiveness of the infarction. CT scanning is a valuable method for determining the regression of the tumor. Labeling the Gelfoam with metal clips was done by Tada[18] in patients with renal cell cancer. With the clips in the periphery of the kidney, Tada was able to monitor regression of the tumor with a standard x-ray. This method of monitoring the effectiveness of therapy in the terminally ill patient is much less expensive, with less radiation exposure than the CT scan. Since no standard method for determining the results of embolization exists, a method of evaluation should be established.

The postinfarction syndrome is seen in almost all patients who undergo embolization. While it is often not considered a complication, it is important to discuss it with the patient prior to the embolization. The most common finding in this syndrome is that of pain, localized to the area of infarction. This pain usually is quite severe and requires narcotic analgesics for the first 24 to 48 hours. The severity of the pain is directly proportional to the amount of tissue infarcted. The next most constant symptom is that of temperature elevation, ranging from 99° to 103° F. This elevation usually lasts from hours to a maximum of one week. Nausea and vomiting, along with ileus, are also commonly reported. This will last for two to three days and can be severe enough to require intravenous fluids to maintain hydration. Mild transient elevations of diastolic blood pressure also have been reported, but usually subside within a few hours postinfarction. Hematuria is a rare and usually transient occurrence. Because of the above syndrome the patient may require hospitalization for three to seven days postinfarction.

There are several true complications that can occur with the embolization procedure, including the complications of angiography in general, with possible contrast reaction, hemorrhage from the puncture site, arterial or venous thrombosis, late pseudoaneurysm formation and renal failure due to the contrast material.[19] The most common significant complication of angiography is arterial or venous thrombosis, for an incidence rate of .4 to 2.3%.[20] Complications with angiography alone are said to occur in one of 500 to 1000 procedures.[17] The complication of renal failure is more of a problem when the angiography is followed by embolization. It was proposed earlier that an advantage of embolization was that it could be performed at the time of an initial angiogram. This has proved to have increased risk because the incidence of renal failure increases with the amount of contrast material used. Therefore, it is best to wait until the contrast material used in the initial angiogram has been removed by the body before the embolization procedure is begun. This should reduce the chances for acute renal failure as a complication of embolization.

Embolization in an undesired vessel has always been recognized as a potential complication. With the lightweight materials such as Gelfoam, there is a great potential for it to reflux from the renal artery into the aorta. This allows embolization of any of the tissues that are perfused by a branch of aorta below the renal artery. It is even possible that the opposite renal artery may pick up the Gelfoam; therefore, this should be considered if there is prolonged postinfarction hypertension. At the other end of the spectrum of possible areas for inadvertent infarctions, Bergreen[7] reported a patient with ischemic gangrene of the distal portion of a foot that required a mid-foot amputation. To prevent this complication several ideas have been suggested. First,

if contrast material is added to the syringe with the Gelfoam, the reflux can be seen and the rate of injection can be slowed accordingly. Some surgeons advocate the use of a balloon catheter to prevent the flow or reflux back into the aorta. This method, however, tends to reduce the flow of blood into the artery and may reduce the peripheral spread of the Gelfoam. Simple measures such as placing the tip of the catheter deeper into the artery will also decrease the chance of reflux.

There have been reports of migration of the steel coil device into unwanted vessels. Mazer[21] reported several reasons why this problem may be occurring. First, when the coil appears to be expelled from the catheter the long threads may be bunched up in the tip of the catheter; thus, when the catheter is withdrawn the coil is pulled out of the renal artery. Second, incorrect selection of coil size can cause problems with unwanted sites of embolization. A coil that is too small might pass through an arteriovenous malformation within the tumor and become lodged in the pulmonary vascular bed. Third, the number of coils used for infarction should be kept to a minimum because there is an increasing chance that the proximal coil will be extruded back into the aorta. This occurs when the tail of dexon on the coil projects out into the aorta, and the rapid flow of blood pulls the last coil out of the renal artery. If unwanted vessels are accidently embolized, a biliary stone extractor can be used to remove the coil and avoid the need for surgery. Klein[22] reports two cases in which migrated coils were removed by this method. However, surgery often is required to correct this complication. To ensure that a steel coil has not migrated, the surgical specimen should be x-rayed and the number of coils compared with a preoperative abdominal film (Figs. 4 & 5). If the surgery is delayed, it is suggested that an abdominal x-ray be taken to determine the location of the coils.

A further complication of the embolization procedure is the failure of the embolic material to produce occlusion. Jhaveri[23] reported occlusion failure in which the vascular supply initially was totally occluded with Gelfoam and two steel coils. One month later, a repeat arteriogram showed wide patency. Therefore, some means of followup should be employed to confirm occlusion. The reasons why total occlusion may not be achieved are varied. Renal carcinoma predisposes for the development of collateral circulation from the retroperitoneal space. A long-term complication is that of recannulization of the previously occluded artery. There is a report in the literature of a true aneurysm formation following coil embolization,[18] which occurred four months after the initial embolization.

Also considered a complication of the embolization procedure is the impairment of surgical nephrectomy when coils are placed too far proximal in the renal artery, making it difficult for the surgeon to ligate the artery.

The complications discussed should decrease in frequency as radiologists become more familiar with the procedure and the materials available. The patient should be studied carefully for collateral circulation and hematologic status. Renal failure should decrease in incidence as the amount of contrast load to the patient is decreased. Thus, with careful attention to details, the benefits of therapeutic embolization of renal arteries in patients with cancer will greatly outweigh the risks. New developments in the area of chemoembolization and the use of radioactive emboli are sure to add dimension to this procedure. The further development of a standard by which to measure the results of therapy is needed. Such a standard should facilitate the selection of the most beneficial method of treatment for the patient.

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EDITORIAL

Hippocrates and CME

". . . to teach them this art if they so desire without fee or written promise; "

from the Hippocratic Oath

The belief that physicians must continue, for a lifetime, to educate themselves is as old as the profession. Once we enshrined the concept. Now we've encoded the practice and enshrouded it with a miasma of money and glossy promotions.

The Kentucky Medical Association almost mandated CME some years ago until, in a spasm of good judgement, the mandatory part was voted out. No honest healer disputed the necessity of study forever, but lots of honest ones are amazed at what CME has become. There are surely some great programs, scholarly, well-done, timely, germane and inexpensive. But for others, tour promoters grow plump, academicians teach with unprecedented zeal for astonishing fees, luxurious retreats, both afloat and ashore, are booked to capacity, a national authority on something unhesitatingly demands expenses plus a paycheck that would please even a tarnished senator.

Six hours of Category I credit could certainly cost an avid golfer a thousand or two, or much more if the center of learning is Palm Springs or Cashmere. Authorities once respected seem to have become little more than overpaid tour guides. Surely it raises, posthumously, the hackles of Hippocrates.

All this grumbling is preamble to saying that the writer is just back from an excellent CME Symposium, an unusual one, in the Kenya Highlands, a place of rare beauty and perfect climate, a site selected because it was close to the physicians and affordable.

It ran for eight days with up to 10 didactic hours per day. That's unusual. So was the registration fee ($5 for registrants, $50 for the teachers) and the board and room cost ($10 per day). There were up to six doctors per room and there was often hot water for showers. Attenders could obtain at least 60 hours of Category I credit, primarily because they wanted it.

Attending were over 100 practitioners of Mission Medicine. Most have other specialty interests, too. Many have the highest qualifications, but their practices require a broad grounding in many areas of medicine and surgery, so they picked their lectures from 120 hours of didactic presentations, given by 20 teachers who personally paid all of their own expenses.

Almost as valuable as the lectures were the informal discussions—how to get a coin from the esophagus, or a bead from an ear, without special instruments. There were authorities there on a new filing system for bush hospital records, powering an irrigation system with solar power, or the home care of paraplegics in a primitive society; and on into the night.

The Christian Medical Society, which has now sponsored and promoted three of these symposia in Africa, and the University of Louisville School of Medicine which has given academic recognition and organization to the programs through its Assistant Dean for CME, Mr. Gerald Swim, can take a quiet satisfaction in having offered these opportunities and the Western world, even when it doesn't share their Faith, can be proud of these missionary physicians. Most are tough and tenacious professionals getting by on low pay for long terms of service, despite isolation and difficulty, and sometimes danger. And there, in Central Africa, for those days they came together from Zaire and Tanzania and Nepal and Gaza to teach, to learn, and to share their experience and their Beliefs.

It was an intensive, exhausting period of study and fraternity and it was deeply satisfying to all who attended. Perhaps CME should be more like that. One fancies that Hippocrates would say that this is the type of program which falls within his guidelines.

David L. Stewart, M.D.

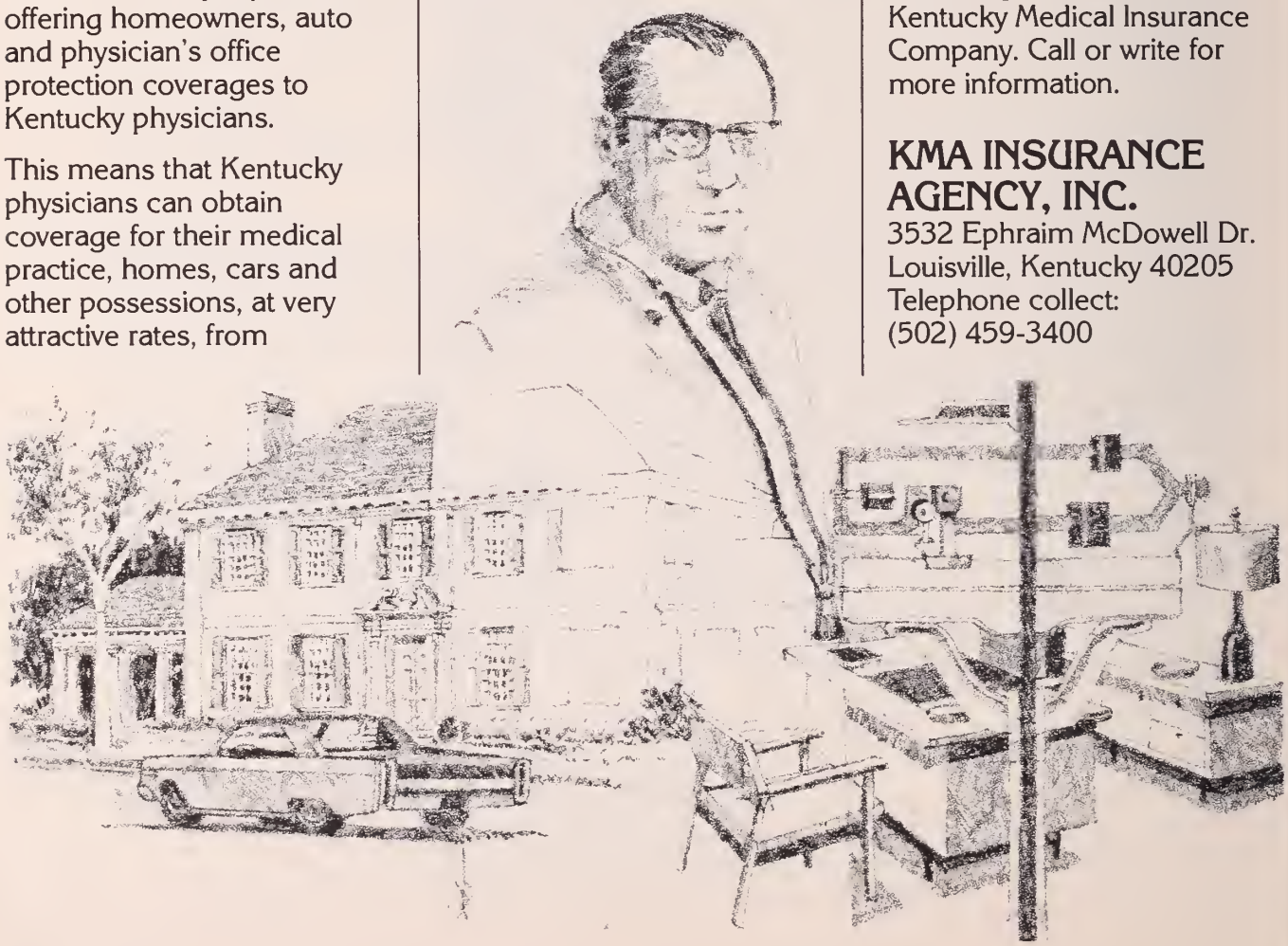
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LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

I am writing to you concerning the lead article in the April 1982 edition of *The Journal Of The Kentucky Medical Association*. The article is entitled Sedative Drugs for Delirium Tremens by Myron G. Sandifer, M.D. and Gary Yarbrough, M.D.

This brief review distinguishes between "acute simple withdrawal and delirium tremens." It basically recommends the use of benzodiazepines for management of delirium tremens and states that "in the United States the benzodiazepines are unquestionably the preferred drugs."

No mention is made of the nature of the alcohol addiction, or that the use of benzodiazepines substitutes one chemically addicting substance for another. Persons who abuse alcohol tend to find out over time which doctors prescribe sedating medications for withdrawal and which do not. In some instances that would raise a question as to whether there was withdrawal at all or merely a transfer to another drug.

On the other hand, in 25 years of experience in general psychiatric practice, both at Bellevue Hospital, and in private practice in Louisville, I have found the use of antipsychotic drugs such as chlorpromazine more than adequate for providing sedative and antipsychotic effect. It does not have the complication of addictive crossover.

Warren M. Cox, M.D.
Louisville, KY

Stephen Z. Smith, M.D.
Assistant Scientific Editor

BOOK REVIEWS

Current Pediatric Diagnosis & Treatment

C. Henry Kempe, MD; Henry K. Silver MD; Donough O'Brien, MD, FRCP (7th Edition)

Lange Medical Publications, 1982, 1106 pages

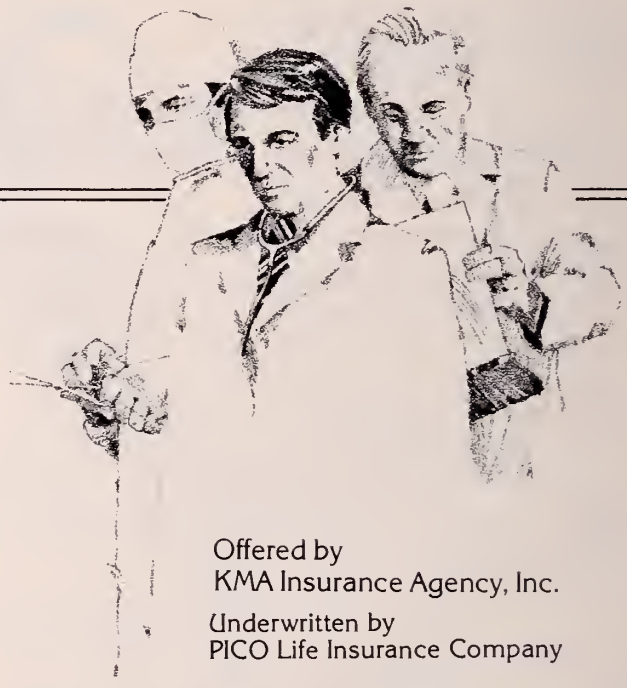
This is the biennial rejuvenation of this popular paperback. Its sibling publications in other medical fields form the basis for a complete, informative, economical way of keeping informed. However, the book is also meant to appeal to the legions of extra-physician health care professionals under whose rubric many distantly related fields maintain a medical liaison. For the medical student or trainee and for the established practitioner and academic, this literary lightweight style is sometimes irritating.

Taking the view that the pediatrician deals with young age patients, the spectrum of pediatric care is a condensation of the other medical practices. In this regard, the book extends itself to be quite complete. The initial chapters deal with the newborn and growing child, noting the common landmarks, referencing growth and development criteria in handy tables. Immunization requirements are discussed, but the reader is made cognizant of the potential adverse reactions and precautions. The early part then goes both sequentially and chronologically to adolescence, and despite some insertions of biased statements about his behavior, the adolescent patient turns out to be manageable and with his own unique medical considerations. The polyauthorship is apparent here where venereal disease, contraception, etc. are juxtaposed to growth maladaptions. Then various specialties take the stage with each organ system having a play. Of course, each author pays respect to the cause by amending each presentation to refer to the pediatric patient. The round-up of some 150 pages is filled with useful information on physiology, genetics and pharmacology in the pre-adult population.

There are no illustrations and reading straight through compares to running a marathon—no breaks, much sweat and euphoria at the finish line. I am glad to have it in my library. The references are considerately picked and screened, the index is obsessive and the cost is manageable.

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J-9043-4 July '81

The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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The efficacy of Dalmane has been studied in over 200 clinical trials with more than 10,000 patients.[3-15] During long-term therapy, which is rarely required, periodic blood, kidney and liver function tests should be performed. Contraindicated in patients who are pregnant or hypersensitive to flurazepam.

Please see summary of product information on following page.

References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2. **2.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED. The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9):1-6, Sep 1970. **15.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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Postgraduate Opportunities

AUGUST

6-7 Anterior & Posterior Vitrectomy Workshop, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

13-14 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hyatt Regency Nashville, Nashville, TN

SEPTEMBER

10-11 Diseases of the Ear, Bethesda Hospital and Deaconess Association, Stouffer's Cincinnati Towers, 141 W. Sixth Street, Cincinnati, OH

13-15 The National Kidney Foundation, The U.S. Department of Health & Human Services, & the International Life Sciences Institute Symposium, "Nutrition and Blood Pressure Control," Stouffer's National Center Hotel, Arlington, VA

13-16 1982 Annual Meeting, United States Section International College of Surgeons, "International Surgical Frontiers," Resorts International Hotel, Atlantic City, New Jersey

20-24 Annual Convention of American Association of Medical Assistants, Shamrock Hilton Hotel, Houston, TX

21-23 KMA Annual Meeting, Hyatt Regency, Lexington, KY

24-26 Regional Postgraduate Meeting. Marriott Hotel, New Orleans, LA. Contact: Jeanette Stone, Registrar, Southern Medical Association, PO Box 2446, Birmingham, AL 35201

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

1-2 Eleventh Annual Symposium, Post Graduate Course, "Quality of Life: Quality of Care," Western Division, American Geriatrics Society, Westin Bayshore Hotel, Vancouver, British Columbia

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, Cincinnati, OH

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

9-17 The Seventh Annual International Body Imaging Conference, Sheraton Royal Waikoloa Hotel, Kona, Hawaii

11-14 International Continuing Medical Education (CME) Meeting, Honolulu, Hawaii

11-14 Update '82: State of the Art, Science, and Profession, American Psychiatric Association, The Galt House, Louisville, KY

22-23 International Medical Education Corporation, Arrhythmias and Cardiac Ischemia: Diagnosis and Management, Stouffers Cincinnati, OH

22-23 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hyatt Lincolnwood, Chicago, IL

26 UKMC, The Lexington Seminars in Medicine and Nephrology, "Hypercalcemia of Malignancy," Hyatt Regency Hotel, Lexington, KY

29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

30-2 76th Annual Scientific Assembly, a conjoint meeting of the Southern Medical Association and the Medical Association of Georgia, Peachtree Plaza Hotel and Georgia World Congress Center, Atlanta. Contact: Southern Medical Association, PO Box 2446, Birmingham, AL 35201

NOVEMBER

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

5-6 International Medical Education Corporation, Cardiac Rehabilitation, Hyatt Lincolnwood, Chicago, IL

12-14 East Tennessee State University, Cardiology in the Aging, Johnson City, TN

13 "The Elderly Patient and the Hospital Experience", Bethesda Hospital & Deaconess Assoc., The Terrace Hilton Hotel, 15, West Sixth Street, Cincinnati, OH

16-17 East Tennessee State University, Ellis Orthopaedic Lectureship, Johnson City, TN

20 Wayne State University Schools of Medicine and Law, "Surrogate Mother Symposium, McGregor Memorial Conference Center, Detroit, MI

DECEMBER

3-4 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hilton Plaza Center, Kansas City, MO

3-5 International Medical Education Corporation, Ambulatory Electrocardiography: Clinical Applications, Methodology & Interpretation, Hyatt Regency, Chicago, IL

JANUARY

East Tennessee State University, Forensic Medicine, Johnson City, TN

20-30 Winter Congress International Body Imaging Conference, St. Moritz, Switzerland

FEBRUARY

East Tennessee State University, School Health V, Johnson City, TN

23-1 Hurly Medical Center, Adolescent/Young Adult Medicine, Wailea Beach Hotel, Maui, Hawaii

MARCH

1-4 The University of Texas System Cancer Center, "Cancer Invasion and Metastasis, 36th Annual Symposium on Fundamental Cancer Research, Shamrock Hilton Hotel, Houston, TX

East Tennessee State University, Mental Retardation V, Johnson City, TN

APRIL

East Tennessee State University, Orthopaedic Operating Room Nurses: Implants and Instrumentation Techniques, Johnson City, TN

18-29 24th Postgraduate Institute for Pathologists in Clinical Cytopathology, The Johns Hopkins University School of Medicine, Baltimore, MD

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INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
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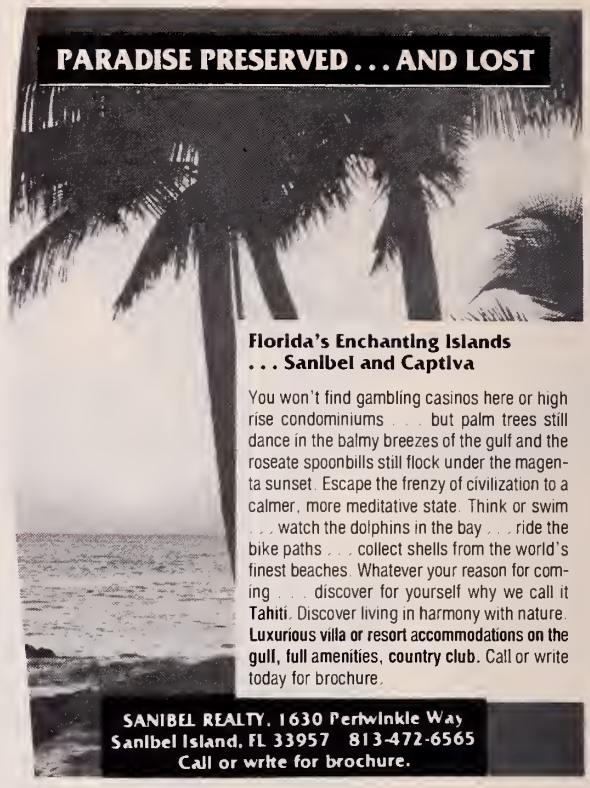
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Ellen C. Sklar

Auxiliary Reports

THE Auxiliary to the Kentucky Medical Association is proud of the accomplishments of the past year, but has accepted the Challenges of the New Year! The objectives for 1982-1983 are varied, but each is vital to sustain the organization.

The first concern is membership. At the present time we number 37% of the membership of the KMA; we would like to increase this to at least 50%. We believe in the medical auxiliary and we believe that all spouses of physicians should be members of our organization. The AKMA is both an elite and unique organization—only spouses of physicians may become members. The auxiliary needs the continued interest, support and membership of all spouses if we are to sustain the cohesiveness of the past and present. Each member plays an important role in the auxiliary.

Secondly, we will continue to emphasize the many Health Projects advocated by the AMA and KMA; these programs are important to our communities. CPR, Child Passenger Safety through the use of seat belts and/or restraints, Spouse and Child Abuse Centers, Teen Drug and Alcohol Abuse Programs as well as programs dictated by the needs of the communities. We would like to expand "Safety on the Streets" to include Bicycle Safety.

A bicycle is classified as a vehicle in the state of Kentucky and as such, those who ride bicycles should be familiar with the rules of the road. Hopefully this will cut down on needless accidents and deaths among children. We will continue to also seek qualified Health Education in the schools from K-12. Health Projects can unite auxiliary members through a common goal and will express to the community that the physician's spouse is concerned. As Auxilians, we can challenge the changing times of new federalism with volunteerism by utilizing the many skills and professions of members. Hopefully we can fill the gap left by the curtailment of the many health and human services. These programs will need not only volunteers but funds and both can be attained through coalitions within the communities—success will depend on unification and dedication of all. We will continue to support, "Make Good Health a Habit." This program advocates total fitness throughout the Lifespan by proper nutrition, daily exercise and mental fitness through the management of stress. This "Shape Up for Life" program is the umbrella for total fitness!

The third objective is to continue to support the many and varied fund raising events for AMA-ERF and McDowell House. AMA-ERF contributions become more significant with the diminishing government support of the medical students and medical schools and the rising cost of education. McDowell House means so much to the auxiliary—a great deal has been accomplished with major repairs, but Dr. McDowell's home is still in need of period furniture

and furnishings. To this list must be added the Ronald McDonald House in Lexington—this house will provide a "home away from home" for children and parents during a difficult period.

The auxiliary offers a purpose for all spouses! A number may choose to support us but remain inactive; others may become very active and creative in fund raisers or may volunteer their skills and/or professions to help the many health projects within their own communities. Do urge your spouse to join there is much to be accomplished.

Briefly, the schedule follows. On August 24th, a one day Leadership Conference will be held in Elizabethtown. Seminars on some of the Health Programs that have been mentioned will be held and there will be speakers on Bicycle Safety Programs and Health Education in the Schools. In September, the Fall Board meeting will be held in conjunction with the KMA Convention. Following the board meeting on Tuesday, the 21st, the spouses will board a bus for a short ride to the Wildcat Lodge where they will tour the home of the UK basketball team. We will reboard for the trip downtown where a favorite Kentucky luncheon will be served in a quaint restaurant while dining, there will be a strolling fashion show. Following this, the bus will tour historic Lexington. The moderator, an auxilian, will tell of plans to preserve the historic buildings in the city. We will then be driven out to Spendthrift Farm to view the famous race horses. The bus is mandatory since parking is limited at the Lodge and Spendthrift does not permit private vehicles into the farm. The auxiliary will offer CPR recertification on Wednesday, the 22nd. In October, five County Presidents-Elect, in addition to the State President and President-Elect, will travel to Chicago for a concentrated two day period of seminars on health projects, volunteerism and an interchange of ideas, information and programs by the 250 County Presidents-Elect from throughout the U.S. as well as the state presidents and presidents-elect from the other 49 states. In April of 1983, the AKMA Convention will be held at the Radisson Plaza in Lexington. The Convention this year will seek to benefit more members by a change in format.

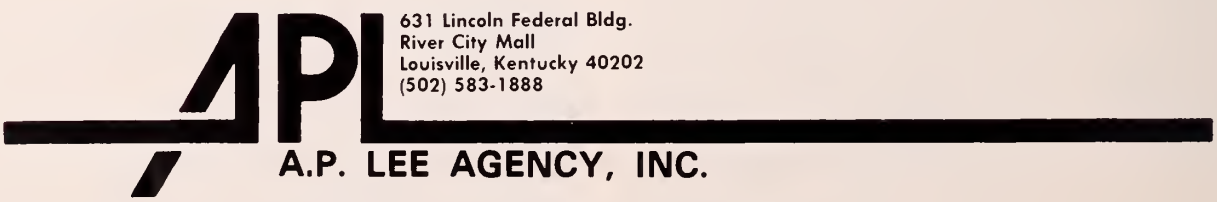
If past performances are indicative of the future, the members will attain these objectives and move ahead!

Ellen C. Sklar (Mrs. Allen), President
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Digest of Proceedings Meeting of the KMA Board of Trustees April 7-8, 1982

The KMA Board of Trustees met in regular session at the KMA Headquarters Building on April 7-8, 1982.

Reports on activities were presented by the President; Secretary-Treasurer; Secretary, State Board of Medical Licensure; Senior Delegate to AMA; KPRO President; and Auxiliary President. Carl Cooper, Jr., M.D., Chairman of the Committee on State Legislative Activities, reported on the recently completed 1982 Kentucky General Assembly.

David T. Allen, M.D., Commissioner, Bureau for Health Services, reported a serious shortfall was anticipated in the Medical Budget, and noted KMA's request for public hearings on two sets of regulations promulgated by the Department regarding eyecare for newborns and mandatory out-patient surgery.

The Board took action to approve the Budget for the 1982-83 fiscal year; to give flexibility to the Executive Committee to obtain industrial revenue bonds to finance the addition to the KMA Headquarters Building; and to decline a request to issue a charter to establish a separate Christian County Medical Society, following results of a poll.

The Board endorsed the establishment by the Voluntary Effort of local health care coalitions, and also endorsed the JCAH standards for the operation of emergency rooms while continuing to study guidelines drafted by the Emergency Medical Care Committee.

The Board agreed with the Committee on School Health's recommendation that only physicians be allowed, by virtue of the School Health Code, to perform examinations on pre-school children; and supported the Committee in its efforts to work with the Department for Human Resources in locating physicians to conduct the exams. In related action, the Board appointed two representatives to serve with members of the Kentucky Academy of Family Physicians and the Kentucky Chapter, American Academy of Pediatrics on an advisory committee to the Department of Education on matters concerning the health of Kentucky's children.

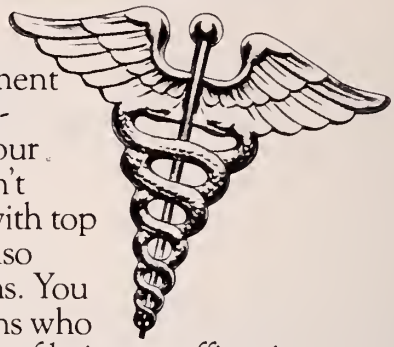
The Board was informed the Department for Human Resources had agreed to continue mandatory tuberculosis testing of school children, but to leave examinations of school personnel to local health department discretion based on TB incidence.

Nominations were made to the KMIC Board of Directors, the Rural Kentucky Medical Scholarship Fund Board of Directors, and for three Governor-appointed Councils. Permission was given to expand the Placement Services Office to include information for communities and physicians seeking part-time medical assistance.

The KMA Insurance Agency, Inc. was authorized to offer additional insurance products to Kentucky physicians and to position a full-time PICO staff person in the Agency Office to help in this endeavor.

The next regularly scheduled meeting of the Board of Trustees was set by the Chairman for August 11-12, 1982.

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In Memorium
John Spencer Harter
1903-1982

THE one-hundred-twentieth President of the Kentucky Medical Association, John Harter, died of a brain tumor at the Highland Baptist Hospital, April eighth. Fortunately, his terminal illness was brief, with generalized weakness and confusion being his only symptoms.

John was the son of a dentist in Kokomo, Indiana. He attended the University of Wisconsin and received his Doctor of Medicine degree from Washington University in St. Louis. When John told the Washington University Professor of Surgery, Doctor Evarts A. Graham, that he was interested in being a thoracic surgeon, he was told to not be silly as no one could make a living doing only thoracic surgery. Characteristically, John was not discouraged and pursued his goal by taking post-graduate work at Barnes Hospital, Strong Memorial Hospital and Massachusetts General Hospital. He was a Surgical Research Fellow at Harvard University and the first thoracic surgical resident and assistant thoracic surgeon at the Lahey Clinic.

During World War II John was frozen in his job as the thoracic surgeon at the Mississippi State Sanitorium. In 1945 he came to Hazelwood Sanitorium to devote one third of his time to Hazelwood, one third to the University of Louisville School of Medicine and the remaining third to private practice. He remained as Chief of the Section of Thoracic Surgery in the School of Medicine until 1971.

John was an excellent teacher and a wise counselor. His consultations were always definite and based on a multitude of information. He was endowed with an inquiring mind and pursued new information with vigor. His devotion to duty and pursuit of excellence may be confirmed by checking the attendance records of the Kentucky Medical Association, the Jefferson County Medical Society, the Kentucky Chapter of the American College of Surgeons, the Kentucky Surgical Society, the Medical Forum, the Louisville Surgical Society, the Transylvania Medical Society, the Medico-Chirurgical Society, the Central Surgical Society, the Southern Thoracic Surgical Association, the Society of Thoracic Surgeons, the American Association for Thoracic Surgery, the American College of Chests Physicians and the International Surgical Society.

A weekly golf game was always approached with enthusiasm by John. Only a trip out of this hemisphere ever caused him to miss the annual Kamp Kaintuck fishing expedition. I am sure every Kentucky physician who knew John was aware of his keen interest in antique automobiles. He and Margaret almost never missed a Louisville Philharmonic Concert.

Many readers of this Journal know John's widow, Margaret, and remember well the strong support she always gave John by attending meetings and vigorously contributing to the Kentucky Medical Auxiliary activities. John and Margaret's son, Burton, is a museum curator in New Orleans.

W. BURFORD DAVIS, M.D.

CLASSIFIED

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The Department of Pediatrics, University of Louisville School of Medicine and Kosair-Children's Hospital is pleased to announce that Lawrence A. Davis, M.D. Clinical Professor of Radiology, will be the 1982 Distinguished John I. Perlstein Lecturer, September 13, 1982 at 11:00 a.m., in the Health Sciences Center Auditorium, Abraham Flexner Way. His presentation will be, "Pediatric Oncology: Then and Now."

For further information, please write:

Billy F. Andrews, M.D., F.A.A.P., F.A.C.P.
Professor and Chairman
Department of Pediatrics
University of Louisville School of Medicine
Louisville, Kentucky 40292

1982 Annual Meeting Section

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KMA OFFICERS 1981-1982



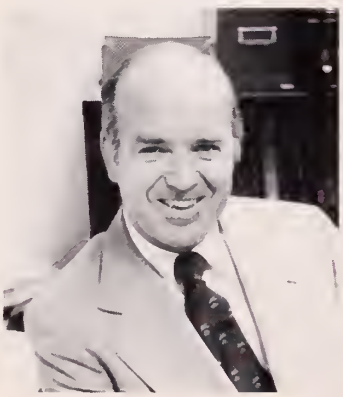
Ballard W. Cassady, M.D.
KMA President



Dwight L. Blackburn, M.D.



Sam D. Weakley, M.D.



S. Randolph Scheen, M.D.



Bennett L. Crowder, II, M.D.



Peter C. Campbell, Jr., M.D.

PRESIDENT-ELECT

Dwight L. Blackburn, M.D.
Berea

Dwight L. Blackburn, M.D. will be installed as President-elect of the Kentucky Medical Association at the President's Luncheon on Wednesday, September 22.

A native of Newark, Ohio, Doctor Blackburn is a graduate of Berea College and the University of Louisville School of Medicine. He is a Past President of the Madison County Medical Society and serves on the staffs of Berea Hospital and Pattie A. Clay Hospital in Richmond.

Doctor Blackburn has been elected to two consecutive terms as Trustee of the 11th Trustee District and has served as Chairman of the KMA Board of Trustees. He also serves as a member of the Board of Directors of the Kentucky Medical Insurance Company.

VICE PRESIDENT

Sam D. Weakley, M.D.
Louisville

Doctor Weakley is a surgeon and has been in practice since 1955. He has been Professor of Surgery since 1977 at the University of Louisville School of Medicine. Doctor Weakley is a member of the Kentucky Medical Association Legislative Committee and has served on the KMA Hospital Committee, KMA Judicial Council and is an Executive Committee member of Claims and Utilization Review. He is a former president of the Jefferson County Medical Society.

SPEAKER OF THE HOUSE

Bennett L. Crowder, II, M.D.
Hopkinsville

Doctor Crowder is a general and thoracic surgeon and a 1961 graduate of the University of Tennessee Medical School. He served an unexpired term of one year as KMA Vice-Speaker and was a member of the House of Delegates from 1971 to 1972. A fellow in the American College of Surgeons, Doctor Crowder also sits on the Constitution and Bylaws Committee of KMA and is a former Secretary of the KEMPAC Board. He is active in numerous civic organizations including the Jaycees, Rotary Club and the Chamber of Commerce.

SECRETARY-TREASURER

S. Randolph Scheen, M.D.
Louisville

Doctor Scheen was KMA Secretary for eight years prior to his election as Secretary-Treasurer in 1975. A dermatologist, he is a graduate of the University of Louisville and University of Minnesota medical schools. Doctor Scheen serves the Association as a member of the Budget Committee and Judicial Council. He is a member of the American Academy of Dermatology and the Alumni Foundation of the Mayo Clinic, and is a regular participant on local television and radio programs, answering questions from the public on dermatology.

VICE-SPEAKER OF THE HOUSE

Peter C. Campbell, Jr., M.D.
Louisville

An ophthalmologist, Doctor Campbell is Clinical Professor of Ophthalmology at the University of Louisville School of Medicine. He is a member of the American Academy of Ophthalmology and Otolaryngology, The Kentucky Academy of Eye Physicians and Surgeons, and is President of the medical staff at Methodist Evangelical Hospital in Louisville. Doctor Campbell is a 1961 graduate of the University of Louisville School of Medicine.

AMA DELEGATES

David B. Stevens, M.D., Lexington

Doctor Stevens is the Senior Delegate to the AMA from Kentucky, having served since 1965 as Delegate or Alternate Delegate. An orthopedic surgeon, Doctor Stevens is a Past President of the Fayette County Medical Society, and served eight years on the KMA Committee on Legislative Activities. A 1955 graduate of Northwestern University, Doctor Stevens is Assistant Clinical Professor of Surgery at the University of Kentucky.



Fred C. Rainey, M.D., Elizabethtown

Doctor Rainey was elected as AMA Delegate in 1974, having previously served as President of KMA, Alternate AMA Delegate, and Board Chairman of KEMPAC. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family physician. He is a member of the AMA Council on Legislation, the American Medical Political Action Committee, the Kentucky Academy of Family Physicians, and the American Academy of Family Physicians.



Harold D. Haller, Sr., M.D., Louisville

Elected an AMA Delegate in 1976, Doctor Haller has been active on the Committee on Maternal and Child Health and the Committee on Health Care Costs. Doctor Haller graduated in 1963 from Bowman Gray Medical School, and has been in family practice since then. A charter member of the American Board of Family Practice, Doctor Haller also has served as President of the Kentucky Chapter of the American Academy of Family Physicians.



NEW TRUSTEES

Bob M. DeWeese, M.D., Louisville

Doctor DeWeese is serving as Trustee from the 5th District. In addition to his private practice in general surgery, Doctor DeWeese is Assistant Professor of Clinical Surgery at the University of Louisville. He received his medical degree from the University of Louisville School of Medicine in 1961. Doctor DeWeese is a former president of the Jefferson County Medical Society.

Nelson B. Rue, M.D., Bowling Green

Doctor Rue is serving as a Trustee from the 6th District. A physician and surgeon at the Graves-Gilbert Clinic, Doctor Rue received his medical degree from the University of Louisville in 1956. He is a member of the Bowling Green and Warren County Medical Society, the AMA and the American College of Surgeons.

Don E. Cloys, M.D., Richmond

Doctor Cloys now serves as the 11th District Trustee. He is in private practice and general surgery in Richmond and on staff at the Pattie A. Clay Hospital in Richmond and the Garrard County Memorial Hospital in Lancaster. Doctor Cloys has been a member of the KMA Reference Committee for the past eight years and is Past President of the Madison County Medical Association.

Roger D. Akers, M.D., Martin

Doctor Akers is serving as Trustee from the 14th District to fill the unexpired term of Charles G. Nichols, M.D. He is Past President of the Floyd County Medical Society and a graduate of the University of Kentucky Medical School. Doctor Akers is Chief of Staff at Our Lady of the Way in Martin and is former Chairman of the Floyd County Board of Health.

Journal Editors
EDITOR

A. Evan Overstreet, M.D., Louisville

Doctor Overstreet had served on the Editorial Board for more than six years before becoming Editor of *The Journal* in September 1977. An internist, Doctor Overstreet is a 1955 graduate of the University of Louisville School of Medicine. He is a member of the American Society of Internal Medicine, the American College of Physicians, and the Transylvania Medical Society.

Paul C. Grider, Jr., M.D., Louisville

Doctor Grider has served as Scientific Editor of *The Journal* since 1975. An internist, Doctor Grider was President of the Louisville Society of Internists from 1976 to 1977 and also former President of the medical staff at Methodist Evangelical Hospital. Doctor Grider is a 1958 graduate of the University of Louisville School of Medicine.

Milton F. Miller, M.D., Louisville

Doctor Miller is Associate Clinical Professor of Medicine at the University of Louisville School of Medicine. An internist, Doctor Miller has served as Assistant Editor of *The Journal* since 1976, and has been on the Membership Committee of the Jefferson County Medical Society. He is a 1954 graduate of the University of Louisville.

G. Randolph Schrodt, M.D., Louisville

Doctor Schrodt has served as Assistant Editor since 1974. A 1954 graduate of the University of Louisville School of Medicine, Doctor Schrodt is a pathologist, and is Professor and Chairman of the Department of Pathology at the University of Louisville School of Medicine. He is a member of the American Society of Clinical Pathologists and the International Academy of Pathology.

Stephen Z. Smith, M.D., Louisville

Doctor Smith has served as Assistant Scientific Editor for *The Journal* since 1977. A dermatologist, Doctor Smith is a 1971 graduate of Johns Hopkins University School of Medicine. He is a member of the American Academy of Dermatology, the Kentucky Medical Association and the American Medical Association.

David L. Stewart, M.D., Louisville

Doctor Stewart, a former Editor of the Jefferson County Medical Society Bulletin, is in his fifth year as Assistant Editor of *The Journal*. A psychiatrist, Doctor Stewart graduated from the University of Louisville in 1946, is a member of the American Psychiatric Association, and is Chairman of the KMA Committee on Physician's Health.

Other Editorial Positions

Regional Editors

Allen E. Grimes, Jr., M.D., Lexington
William W. Hall, M.D., Owensboro
Gordon L. Hyde, M.D., Lexington
William B. Monnig, M.D., Erlanger
Martin J. Raff, M.D., Louisville

Official Call
KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 21, 22, 23, at the Hyatt Regency/Lexington Center, Lexington. The first general session will be called to order at 8:50 a.m., Tuesday.

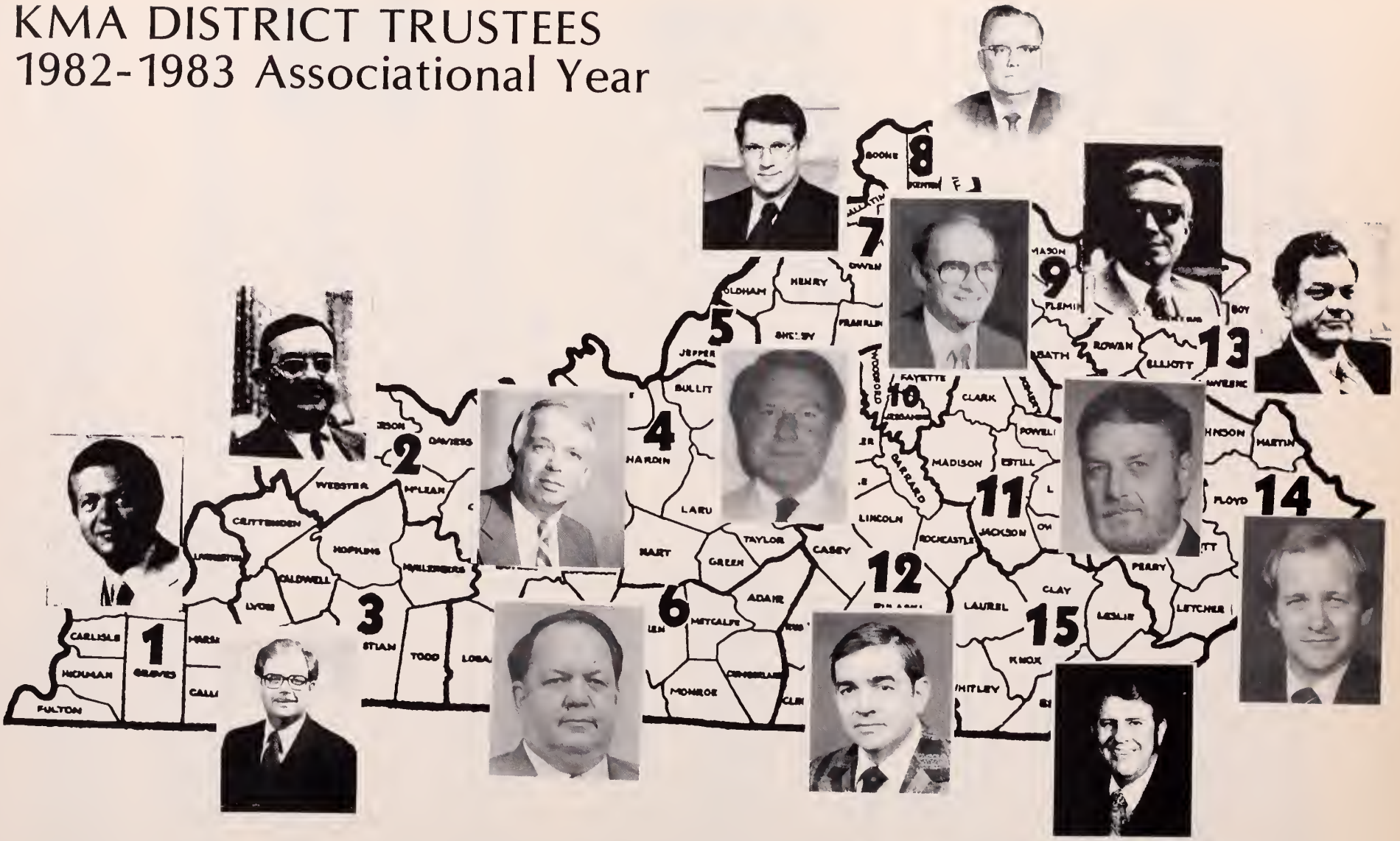
The House of Delegates

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 20, in the Regency Ballroom, Hyatt Regency. The second regular business session will begin at 6 p.m., Wednesday, September 22, in the Regency Ballroom, Hyatt Regency.

Registration

The registration desk will open for Delegates in the Regency Ballroom Foyer, Hyatt Regency Hotel, at 8 a.m. Monday, September 20 and at 5 p.m. Wednesday, September 22. General registration will be held in the lobby of the Lexington Convention Center from 8 a.m. to 5 p.m., Tuesday and Wednesday, and 8 a.m. to 3:30 p.m. on Thursday.

KMA DISTRICT TRUSTEES
1982-1983 Associational Year



1. WALLY O. MONTGOMERY
Paducah

2. R. J. PHILLIPS*
Owensboro

3. HENRY R. BELL
Elkton

4. THOMAS R. TAYLOR
Boston

5. BOB M. DeWEESE
Louisville

6. NELSON B. RUE
Bowling Green

7. WILLIAM P. McELWAIN
Lawrenceburg

8. ROBERT E. SMITH
Covington

9. DON R. STEPHENS
Cynthiana

10. RICHARD F. HENCH†
Lexington

11. DON E. CLOYS
Richmond

12. DANNY M. CLARK
Somerset

13. HOWARD B. McWORTHER
Ashland

14. ROGER D. AKERS
Martin

15. DONALD C. BARTON
Corbin

*Member, KMA Executive Committee
†Chairman, KMA Board of Trustees

KMA DELEGATES

ADAIR

ALLEN
Earl P. Oliver, M.D., Scottsville

ANDERSON

BALLARD

BARREN

BATH

BELL

BOONE
Herbert Francis, M.D., Florence
Don Swikert, M.D., Florence

BOURBON
William Cox, M.D., Paris

BOYD
Walter L. Cawood, M.D., Ashland
Jerald M. Ford, M.D., Ashland
Garner E. Robinson, M.D., Ashland
Charles T. Watson, M.D., Ashland

BOYLE
David C. Liebschutz, M.D., Danville

BRACKEN

BREATHITT

BRECKINRIDGE

BULLITT

BUTLER
Richard T. C. Wan, M.D., Morgantown

CALLOWAY
Gary Marquardt, M.D., Murray

CAMPBELL-KENTON
Gordon Air, M.D., Crestview Hills
Richard Allnutt, M.D., Erlanger
Carl J. Brueggemann, M.D., Covington
Frank Garamy, Jr., M.D., Crescent Springs
Thomas L. Heavern, M.D., Highland Heights
Howard Heringer, Jr., M.D., Ft. Mitchell
William B. Monnig, M.D., Erlanger
Fredrick A. Stine, M.D., Highland Heights
Raymond J. Timmerman, M.D., Ft. Thomas

CARLISLE

CARROLL
Cecil Martin, M.D., Carrollton

CARTER

CASEY
Lewis E. Wesley, M.D., Liberty

CLARK

CLAY
William E. Becknell, Sr., M.D., Manchester

CLINTON
Floyd B. Hay, M.D., Albany

CRITTENDEN

CUMBERLAND
Joseph Skipworth, M.D., Burkesville

DAVIESS

EDMONSON
Omkar N. Bhatt, M.D., Brownsville

ELLIOTT
John F. Greene, M.D., Sandy Hook

ESTILL

FAYETTE
Joseph P. Bark, M.D., Lexington
Robert P. Belin, M.D., Lexington
M. Cary Blaydes, M.D., Lexington
Christopher A. Boarman, M.D., Lexington
Peter P. Bosomworth, M.D., Lexington
Michael E. Daugherty, M.D., Lexington
Marcus L. Dillon, Jr., M.D., Lexington
Harold T. Faulconer, M.D., Lexington
John W. Garden, M.D., Lexington
Ward O. Griffen, Jr., M.D., Lexington
Thomas M. Jarboe, M.D., Lexington
Sally Mattingly, M.D., Lexington
William R. Meeker, Jr., M.D., Lexington
Charles H. Nicholson, M.D., Lexington
Edwin J. Nighbert, M.D., Lexington
Preston Nunnelley, M.D., Lexington
John D. Perrine, M.D., Lexington
Thomas K. Slabaugh, M.D., Lexington
Russell Travis, M.D., Lexington
John E. Trevey, M.D., Lexington
Gary R. Wallace, M.D., Lexington

FLEMING

FLOYD
Roger D. Akers, M.D., Martin
Gangadhar Maddiwar, M.D., Martin

FRANKLIN
John Paul Broderson, M.D., Frankfort
George Hromyak, Jr., M.D., Frankfort
Willis P. McKee, Jr., M.D., Frankfort

FULTON

GALLATIN

GARRARD
Paul Sides, M.D., Lancaster

GRANT

GRAVES
C. Douglas LeNeave, M.D., Mayfield

GRAYSON

GREEN
Robert P. Simmons, M.D., Greensburg

GREENUP

HANCOCK
B. Presley Smith, M.D., Hawesville

HARDIN-LARUE

HARLAN
Milo Schosser, M.D., Lynch
Paul Walstad, M.D., Harlan

HARRISON
Don R. Stephens, M.D., Cynthiana

HART
Evelyn Salisbury, M.D., Munfordville

HENDERSON
Kenneth Eblen, M.D., Henderson
John McClellan, Jr., M.D., Henderson

HICKMAN

HOPKINS
W. R. Alexander, M.D., Madisonville
Richard K. Bachman, M.D., Madisonville
C. R. Dodds, M.D., Madisonville
W. H. Klompus, M.D., Madisonville

JACKSON
Philip Curd, M.D., McKee

JEFFERSON

JESSAMINE

JOHNSON
Nabil Basha, M.D., Paintsville

KNOTT

KNOX
Rufino Crisostomo, M.D., Barbourville

LAUREL

LAWRENCE

LEE
Arnold Taulbee, M.D., Beattyville

LESLIE
Anne A. Wasson, M.D., Hyden

LETCHER
Carl Pigman, M.D., Whitesburg

LEWIS

LINCOLN
Charles E. Crase, M.D., Stanford

LIVINGSTON
Stephen Burkhart, M.D., Salem

LOGAN
Lewis Martin, M.D., Russellville

MADISON
Clifford Kerby, M.D., Berea
William Mitchell, M.D., Richmond

MAGOFFIN

MARION

MARSHALL
Keith E. Ellis, M.D., Benton

MARTIN

MASON
Claude E. Cummins, Jr., M.D., Washington

McCRACKEN
C. Dale Brown, M.D., Paducah
Larry C. Franks, M.D., Paducah
John W. Kraus, M.D., Paducah
Gary McMillan, M.D., Paducah
John D. Noonan, M.D., Paducah

McCREARY

McLEAN

MEADE
Richard L. O'Connell, M.D., Brandenburg

MENIFEE

MERCER
George W. Noe, M.D., Harrodsburg

METCALFE
L. P. Emberton, M.D., Edmonton

MONROE

MONTGOMERY
Robert Salisbury, M.D., Mt. Sterling

MORGAN
Alec Spencer, M.D., W. Liberty

MUHLENBERG
William Miller, M.D., Greenville

NELSON

NICHOLAS
Wendell R. Kingsolver, M.D., Carlisle

OHIO
Robert E. Norsworthy, M.D., Hartford

OWEN

OWSLEY

PENDLETON
Robert L. McKenney, M.D., Falmouth

PENNYRILE

CALDWELL

CHRISTIAN

LYON

TODD

TRIGG

PERRY

PIKE
George F. Buckley, M.D., Pikeville
William M. Johnson, M.D., Pikeville
Roger L. Lubbers, M.D., Pikeville

POWELL

PULASKI

ROBERTSON

ROCKCASTLE

ROWAN
Troy Burchett, M.D., Morehead
Ranjit Sinha, M.D., Morehead

RUSSELL
Richard S. Miles, M.D., Russell Springs

SCOTT
R. Kendall Brown, M.D., Georgetown

SHELBY-HENRY-OLDHAM
Robert Houston, M.D., Eminence
Edward Houchin, M.D., LaGrange
Willis McKee, M.D., Shelbyville

SIMPSON

SPENCER
William K. Skaggs, M.D., Taylorsville

TAYLOR
Eugene H. Shively, M.D., Campbellsville

TRIMBLE
Carl Cooper, Jr., M.D., Bedford

UNION

WARREN

WASHINGTON

WAYNE

WEBSTER

WHITLEY
Roemer D. Pitman, M.D., Williamsburg
Carmel Wallace, Jr., M.D., Corbin

WOLFE
Paul F. Maddox, M.D., Campton

WOODFORD
William J. Graul, M.D., Versailles

Reference Committee Activity

Speaker Bennett L. Crowder, II, M.D., Hopkinsville, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 20. A brief session for Reference Committee Chairmen will be held at 12:30 p.m., Monday, in the Atlanta Room of the Hyatt Regency Hotel.

Any KMA member wishing to testify on any resolution or report is urged to attend the Reference Committee meetings which will be held at 2:00 p.m., Monday, September 20, in the Conference Center of the Hyatt Regency Hotel. These open sessions will last at least one hour for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be present at the final meeting of the House, Wednesday evening, September 22, in the Regency Ballroom in the Hotel.

As Speaker of the House of Delegates, Doctor Crowder is finalizing appointments to the six Reference Committees, Credentials Committee, and Tellers Committee.

If your Society has not yet submitted the name of your Delegate(s) to the Headquarters Office, you should do so immediately as only those names recorded in the office can be considered for appointment to one of these important Committees.

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and six Alternate Trustees at its second regular meeting, Wednesday, September 22. Nominations will be made by the Delegates from the electing Districts at a meeting following the first meeting of the House on Monday, September 20.

The Nominating Committee will report at the close of the first scientific session on Tuesday, September 21. Further nominations may be made from the floor at the final meeting of the House on Wednesday, September 22. All nominations are considered and acted upon by the Delegates at this final meeting.

Districts electing Trustees for three-year terms are: **SECOND DISTRICT** (incumbent, R. J. Phillips, M.D., Owensboro); **SEVENTH DISTRICT** (incumbent, William P. McElwain, M.D., Lawrenceburg); **NINTH DISTRICT** (incumbent, Donald R. Stephens, M.D., Cynthiana); **TENTH DISTRICT** (incumbent, Richard F. Hench, M.D., Lexington); and **THIRTEENTH DISTRICT** (incumbent, Howard B. McWhorter, M.D., Ashland).

Trustees in the 7th and 10th Districts are eligible for re-election, while Trustees in the 2nd, 9th, and 13th Districts have served two full terms and are **not** eligible for re-election.

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are: Albert H. Joslin, M.D., Owensboro (2nd); Cecil D. Martin, M.D., Carrollton (7th); R. Kendall Brown, M.D., Georgetown (9th); Colby N. Cowherd, M.D., Lexington (10th); and Ranjit Sinha, M.D., Morehead (13th).

In addition, an Alternate Trustee will be elected in the 14th District to fill an unexpired term ending in 1983.

Alternate Trustees in the 7th, 9th, 10th, and 13th Districts are eligible for re-election. The Alternate Trustee in the 2nd District is **not** eligible.

The Alternate Trustee elected in the 14th District will serve for one year.

Nominating Committee to Meet Monday, September 20

The KMA Nominating Committee will hold an open meeting at the close of the first meeting of the House of Delegates, Monday, September 20, in the Regency Ballroom of the Hyatt Regency Hotel. Any KMA member may confer with the Committee during this meeting.

The report of the Nominating Committee will be posted in the general assembly hall at the conclusion of the first general session, Tuesday morning, September 21.

Nominations may be from the floor during the second meeting of the House of Delegates, Wednesday evening, September 22. The House will vote on the nominees at the close of this meeting.

Members of the Committee are: Carl Cooper, Jr., M.D., Bedford, Chairman; James A. Baumgarten, M.D., Owensboro; Harold T. Faulconer, M.D., Lexington; Thomas L. Heavern, Jr., M.D., Highland Heights; and Walter I. Hume, Jr., M.D., Louisville.

House to Elect New Officers During Annual Meeting

KMA Officers for the 1982-83 Associational year will be elected by the House of Delegates at the close if its final meeting, Wednesday evening, September 22. Officers to be elected from the state at large are as follows:

Office	Term
President-Elect	One Year
Vice President	One Year
Delegate to the AMA	Two Years
*Harold D. Haller, M.D.	
Alternate Delegate to the AMA	Two Years
*Kenneth P. Crawford, M.D.	

*Incumbent

The AMA Delegate and Alternate are to be elected for two-year terms from January 1, 1983, to December 31, 1984.

KMA Annual Meeting
Sept. 20-23, 1982
Hyatt Regency,
Lexington, KY

KMA Auxiliary will offer a CPR (cardiopulmonary resusitation) course Wednesday, Sept. 22.

Fee for the course is $10

To register, please fill out form and return to:

Mrs. Dennis B. Kelly
1228 Indian Mound Road
Lexington, KY 40502

Name _____

Address _____

☐ Basic Course

☐ Recertification

Annual Meeting Special Features



SCIENTIFIC SESSIONS are scheduled for September 21, 22, and 23 at the Lexington Convention Center, Lexington. The theme for the 1982 scientific session is "Emergency Medicine." Both the presentations and discussion periods will contribute to the continuing medical education of Kentucky's physicians.

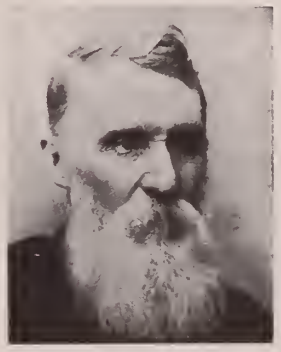
TWENTY-ONE SPECIALTY GROUPS will hold meetings on the afternoons of September 21 and 23. Beginning at 1:30 p.m., the meetings will be held at the Hyatt Regency/Lexington Center. Individual programs of the specialty societies are listed in this issue. No general sessions are scheduled during the specialty group meetings and all KMA members are invited to attend any specialty meetings.

SCIENTIFIC AND TECHNICAL EXHIBITS will display new medical products, services and techniques at the Lexington Convention Center during the 1982 Annual Meeting. Members and guests are urged to take the opportunity to view products of interest at the 30-minute intermissions scheduled during each general and specialty session.

THE KMA HOUSE OF DELEGATES will meet twice during the Annual Meeting. The first session of the House will be held at 9 a.m., Monday, September 20, in the Regency Ballroom of the Hyatt Regency. The final session will be held Wednesday, September 22, at 6 p.m. in the Regency Ballroom, Hyatt Regency. Officers for the 1982-83 Associational year will be elected at the second session.

THE PRESIDENT'S LUNCHEON will feature James H. Sammons, M.D., AMA Executive Vice President. Held at 11:30 a.m., Wednesday, September 22, in the Patterson Ballroom of the Hyatt Regency. The Luncheon also will include the presentation of KMA awards and the installation of the 1982-83 KMA President, Dwight L. Blackburn, M.D.

1982 Annual Meeting to Honor Past President Greenley



The 1982 Annual Meeting of the Kentucky Medical Association will be officially titled "The T. B. Greenley Memorial Meeting" in remembrance of the 1902 President of the Association.

The tradition of honoring a past president of KMA and other distinguished physicians originated at the 1935 Annual Meeting.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography on Doctor Greenley for the Annual Meeting program booklet to be distributed during the meeting in Lexington, September 20-23.

1982 KMA ANNUAL MEETING



September 20, 21, 22, 23, 1982

1982 Annual Meeting Program Summary

Kentucky Medical Association

September 18, 19, 20, 21, 22, and 23

Hyatt Regency Hotel/Convention Center

Lexington

SATURDAY, SEPTEMBER 18

6:00 p.m.	KMA Executive Committee Meeting and Dinner	Chicago-Atlanta Rooms

SUNDAY, SEPTEMBER 19

12:30 p.m.	KMA Board of Trustees Meeting and Luncheon	Hyatt Suite, Hyatt Regency

MONDAY, SEPTEMBER 20

9:00 a.m.	First Meeting, KMA House of Delegates	Regency Ballroom, Hyatt Regency
12:30 p.m.	Luncheon, Reference Committee Chairmen	Atlanta Room, Hyatt Regency
2:00 p.m.	Reference Committee Meetings	Linda Neville Room, John Hunt Morgan Room, Patterson A, B, and C, Issac Scott Hathaway Room, Hyatt Regency
6:00 p.m.	KEMPAC Reception, Banquet, and Seminar	Regency Ballroom, Hyatt Regency

TUESDAY, SEPTEMBER 21

8:00 a.m.	Registration	Lobby, Lexington Convention Center
8:50 a.m.	Opening Ceremonies	Ballrooms 3 & 4, Convention Center
9:00 a.m.	First Scientific Session	Ballrooms 3 & 4, Convention Center
12:00 noon	Luncheon Meeting, Executive Committee and Reference Committee Chairmen	Atlanta Room, Hyatt Regency
1:30 p.m.	Specialty Group Sessions, Convention Center (Twelve Groups will meet simultaneously at this time. Their programs begin on page 548)	
5:30 p.m.	Reception Honoring Dwight L. Blackburn, M.D. and Mrs. Allen Sklar	Foyer, Regency Ballroom, Hyatt Regency

WEDNESDAY, SEPTEMBER 22

8:40 a.m.	Second Scientific Session	Ballrooms 3 & 4, Convention Center
9:00 a.m.	CPR Course	Meeting Rooms A, B, E, and F, Convention Center
11:50 a.m.	President's Luncheon	Patterson Ballroom, Hyatt Regency
2:30 p.m.	Third Scientific Session	Ballrooms 3 & 4, Convention Center
3:00 p.m.	KMA Board of Trustees Meeting and Dinner	Hyatt Suite, Hyatt Regency
6:00 p.m.	Second Meeting, KMA House of Delegates	Regency Ballroom, Hyatt Regency

THURSDAY, SEPTEMBER 23

9:00 a.m.	Fourth Scientific Session	Ballrooms 3 & 4, Convention Center
12:00 noon	KMA Board of Trustees Meeting and Luncheon	Hyatt Suite, Hyatt Regency
1:30 p.m.	Specialty Group Sessions, Convention Center (Nine Specialty Groups will meet simultaneously at this time. Their programs begin on page 554)	

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits

The Kentucky Medical Association SCIENTIFIC PROGRAM T.B. Greenley Memorial Meeting Hyatt Regency/Lexington Center

PRESTON V. DILTS, JR., M.D.
Knoxville, Tennessee



Chairman, Department of Obstetrics and Gynecology, University of Tennessee, Knoxville. M.D., 1959, Northwestern Medical School, Chicago. Member, American Association of Obstetrics and Gynecology; Society for Gynecological Investigation; Tennessee Medical Association; AMA. Author of numerous publications.

BARRY H. RUMACK, M.D.
Denver, Colorado



Associate Professor of Pediatrics, University of Colorado Health Sciences Center, Denver, CO; Director, Rocky Mountain Poison Control Center, Denver Department of Health & Hospitals. M.D., 1968, University of Wisconsin. Fellow of the American Academy of Clinical Toxicology and the American Academy of Pediatrics. Member of the American Association of Poison Control Centers, the Western Society of Pediatric Research, the Society for Pediatric Research and the Society of Toxicology. Author of numerous publications.

TUESDAY, SEPTEMBER 21

MORNING GENERAL SESSION

Ballard W. Cassady, M.D., Pikeville
KMA President, Presiding

Ballrooms #3 & #4—Lexington Center

8:15 a.m. **Movie**
8:50 a.m. **Opening Ceremonies**
9:00 a.m. **"Airway Resuscitation"**
David Downing, M.D., Dallas, Tex.
9:20 a.m. **"Abruptio Placentae"**
Preston V. Dilts, Jr., M.D., Memphis, Tenn.
9:40 a.m. **"Acute Acetominephen Poisoning"**
Barry Rumack, M.D., Denver, Colo.
10:00 a.m. **Intermission to Visit Exhibits**
10:30 a.m. **Assessment of Abdominal Injuries"**
H. William Scott, M.D., Nashville, Tenn.
10:50 a.m. **"Evaluation of the Patient with Acute Head Injury"**
Robert L. Campbell, M.D., Indianapolis, Ind.
11:10 a.m. **"Acute Scrotal Swelling: An Emergency Situation"**
Clyde E. Blackard, M.D., Minneapolis, Minn.
11:30 a.m. **"Acute Respiratory Failure in COPD"**
Steven A. Sahn, M.D., Denver, Colo.

AFTERNOON SESSION

SPECIALTY GROUP MEETINGS

Kentucky Society of Anesthesiologists
Ballroom #3—Lexington Center

1:30 p.m. **"Advanced Monitoring Techniques in the Operating Room"**
David Downing, M.D., Dallas, Tex.
2:30 p.m. **Intermission to Visit Exhibits**
3:00 p.m. **"Recent Advances in Pediatric Anesthesia"**
Ronald E. Smith, M.D., Louisville
3:30 p.m. **Topic To Be Announced**
Robert B. Boettner, M.D., Lexington

Kentucky Chapter American College of Chest Physicians
Meeting Room E—Lexington Center
Program to be Announced

Kentucky Chapter
American College of Emergency Physicians
Meeting Room F—Lexington Center

1:30 p.m. **"Organization of Medical Services for Management of Mass Chemical Exposures"**
Daniel Teitelbaum, M.D., Denver, Colo.
2:30 p.m. **Intermission to Visit Exhibits**
2:40 p.m. **"Emergency and Definitive Management of Significant Exposure to Pulmonary Toxicants"**
Daniel Teitelbaum, M.D., Denver, Colo.
3:40 p.m. **Intermission to Visit Exhibits**
3:50 p.m. **"Diagnosis and Management of Acute and Chronic Sequealae of Pesticide Exposure"**
Daniel Teitelbaum, M.D., Denver, Colo.
4:50 p.m. **Intermission to Visit Exhibits**
5:00 p.m. **Business Meeting**

Kentucky Neurosurgical Society
Meeting Room A—Lexington Center
Program to be Announced

KOGS—Kentucky Section ACOG
Meeting Room B—Lexington Center

1:30 p.m. **"Toxic Shock Syndrome"**
David Hager, M.D., Lexington
2:00 p.m. **Topic to be Announced**
Preston V. Dilts, Jr., M.D., Memphis, Tenn.
2:30 p.m. **Intermission to Visit Exhibits**
3:00 p.m. **"Circumcision of the Newborn"**
Steve Armstrong, M.D., Elizabethtown
3:30 p.m. **"Ectopic Pregnancy"**
Dave Sprague, M.D., Henderson

Kentucky Orthopaedic Society
Ballroom #4—Lexington Center

1:00 p.m. **"Anterior Decompression for Neurologic Deficit"**
John R. Johnson, M.D., Louisville
Kenton D. Leatherman, M.D., Louisville
Richard T. Holt, M.D., Louisville
Rodger J. Zwemer, Jr., M.D., Louisville
1:15 p.m. **Discussion**
1:20 p.m. **"Spinal Posture in the Sagittal Plane"**
Richard L. Munk, M.D., Lexington
1:35 p.m. **Discussion**
1:40 p.m. **"Preliminary Results with Luque Fusion for Spinal Deformity"**
Thomas Knox, M.D., Lexington
David B. Stevens, M.D., Lexington
1:55 p.m. **Discussion**
2:00 p.m. **"The Zielke Procedure"**
Richard T. Holt, M.D., Louisville
Kenton D. Leatherman, M.D., Louisville
John R. Johnson, M.D., Louisville
Rodger J. Zwemer, Jr., M.D., Louisville
2:15 p.m. **Discussion**

HENRY W. SCOTT, JR., M.D.
Nashville, Tennessee



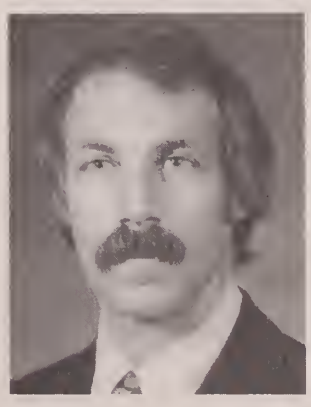
Director, Section of Surgical Sciences. Professor and Chairman, Department of Surgery, Vanderbilt University School of Medicine. M.D., 1941, Harvard Medical School, Boston. Clinical Professor of Surgery Meherry Medical College. Surgeon-In-Chief Vanderbilt University Hospital. Member, American Association for Thoracic Surgery; Former President American College of Surgeons; former President, American Surgical Association. Member, editorial boards *Current Problems in Surgery and Surgical Techniques.*

CLYDE E. BLACKARD, M.D.
Minneapolis, Minnesota

Chief of Surgery, Methodist Hospital, Minneapolis, Minnesota; Clinical Professor, Department of Urologic Surgery, University of Minnesota; Chairman, Department of Urology, St. Louis Park Medical Center, Minneapolis. Consultant in Urology, Gillette State Hospital for Crippled Children, St. Paul, MN. M.D., 1957, Indiana University, Indianapolis, IN. Specialty Editor in Urology; Associate Editor for *Minnesota Medicine.* Member of the AMA, Minnesota Medical Association, American College of Surgeons, North Central Section of American Urological Association, and American Urological Association. Author of numerous publications.



STEVEN A. SAHN
Englewood, Colorado



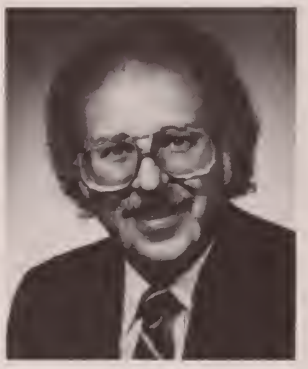
Associate Professor of Medicine, Division of Pulmonary Sciences, University of Colorado Health Sciences Center. M.D., 1968 University of Louisville School of Medicine. Fellow, American College of Physicians; American College of Chest Physicians. Member, American Thoracic Society, American Federation for Clinical Research; British Thoracic and Tuberculosis Association. Consultant to the Editorial Board of American Review of Respiratory Disease, *American Journal of Medicine* and *Journal of Respiratory Diseases.* Author of numerous books and publications.

PATRICK McKEGNEY, M.D.
Burlington, Vermont



Professor, Department of Psychiatry; Professor, Department of Medicine, University of Vermont, College of Medicine, Burlington, VT. M.D., 1958, Yale University School of Medicine, New Haven, CT. Member, American Board Neurology and Psychiatry; American Psychiatric Association; Internal College Psychosomatic Medicine. Editorial Board *General Hospital Psychiatry.*

DANIEL T. TEITELBAUM, M.D.
Denver, Colorado



President Worksafe, Inc., Denver, Colorado. 1973 to 1979, President of Poison Lab/Enbionics, Division of Chemed Corporation, Denver. Founder and President, Poison Lab, Denver. Private practice of clinical toxicology, Denver. Member, College of American Pathologists; American Academy of Clinical Toxicology, American Association of Poison Control Centers; Forensic Science Society. Author of numerous publications.

ARTHUR L. BROOKS, M.D.
Nashville, Tennessee



Professor and Acting Chairman Orthopedics and Rehabilitation, Vanderbilt University. Chief, Orthopedic Service, Veterans Administration Hospital, Nashville. M.D., 1952, Vanderbilt University, Nashville, TN. Past President Vanderbilt Orthopedics Society and Nashville Orthopedic Society. Member, American Academy of Orthopedic Surgeons; American Society for Surgery of the Hand; Clinical Orthopedic Society; Tennessee State Medical Society.

2:20 p.m. **"Lateral Condylar Fractures in Children"**
William S. Armstrong, M.D., Lexington
Thomas D. Brower, M.D., Lexington
2:25 p.m. **Discussion**
2:30 p.m. **"'Tip Off' Fracture Dislocation of the Os Calcis"**
Wayne W. Kotcamp, M.D., Louisville
Bijan Ahmadi, M.D., Louisville
2:45 p.m. **Discussion**
3:00 p.m. **Intermission to Visit Exhibits**
3:30 p.m. **"Treatment of Complex Elbow Injuries"**
Arthur L. Brooks, M.D., Nashville, Tenn.
3:55 p.m. **Discussion**
4:00 p.m. **"External Fixation of Complex Upper Extremity Fractures"**
W. Ben Kibler, M.D., Lexington
4:15 p.m. **Discussion**
4:20 p.m. **"Newer Techniques in Complex Total Hip Replacement"**
John R. Allen, M.D., Lexington
4:35 p.m. **Discussion**
4:40 p.m. **"Experience with High Tibial Fasciotomies at the Veterans Administration Medical Center, Lexington, Kentucky"**
Kim Chillag, M.D., Lexington
Paul J. Nicholls, M.D., Lexington
4:55 p.m. **Discussion**
5:00 p.m. **Business Meeting**
5:40 p.m. **Cocktails & Hors D'oeuvres**
Hyatt Regency

Kentucky Society of Pathologists
John Hunt Morgan Room
(Patterson Ballroom)—Hyatt Regency

1:30 p.m. **"The Medical/Legal Autopsy"**
Charles S. Hirsch, M.D., Cincinnati, Ohio
2:30 p.m. **Intermission to Visit Exhibits**
3:00 p.m. **"A Review of Craniocerebral Trauma"**
Charles S. Hirsch, M.D.

Kentucky Chapter
American Academy of Pediatrics
Patterson Ballroom A—Hyatt Regency

1:30 p.m. **"Evaluation of the Child with Unknown Poisoning"**
Barry Rumack, M.D., Denver, Colo.
2:10 p.m. **"Dog Bite Controversies in Current Management"**
Janet Guy, M.D., Lexington
2:40 p.m. **Intermission to Visit Exhibits**
3:10 p.m. **"Evaluation and Management of Intraoral Trauma"**
Emmett R. Costich, DDS, Ph.D., Lexington
3:40 p.m. **"The Accident Prone Child"**
Abe Fosson, M.D., Lexington
4:10 - 5:10 p.m. **Kentucky Chapter, AAP Business Meeting**

Kentucky Society for Plastic and Reconstructive Surgery
Meeting Room C—Lexington Center

1:30 p.m. **"Reconstruction After Upper Extremity Trauma Using Free Flap Coverage"**
James Apesos, M.D., Lexington

1:40 p.m. **"The Scapular Free Flap and Its Clinical Applications"**
Joseph Banis, M.D., Louisville

1:55 p.m. **"Segmentally Split Musculocutaneous Flaps in Head and Neck Reconstruction"**
Gordon Tobin, M.D., Louisville

2:05 p.m. **"Photoplethysmography as a Monitoring Aid in Skin Flap Surgery"**
Robert Acland, M.D., Louisville

2:15 p.m. **"Breast Reconstruction Following Mastectomy"**
Raleigh Archer, M.D., Lexington

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Surgical Treatment of the Extensively Injured Lower Extremity"**
James W. May, Jr., M.D., Boston, Mass.

3:30 p.m. **"Radiation Failure in Early Cancer of Larynx"**
Gene Moore, M.D., Lexington

3:40 p.m. **"Human Bites to the Face: A Case for Surgical Debridement and Primary Closure"**
Chile Robinson, M.D., Louisville

3:50 p.m. **"CT Scan in Plastic Surgery"**
Steve Gottlieb, M.D., Lexington

4:15 p.m. **Annual Business Meeting**

Kentucky Psychiatric Association
Issac Scott Hathaway Room—Hyatt Regency

1:30 p.m. **"Stress: A Psychosocial View"**
John J. Schwab, M.D., Louisville

2:00 p.m. **"The Psychobiology of Acute Stress"**
Joel Elkes, M.D., Louisville

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Stress, Immunity, and Cancer"**
F. Patrick McKegney, M.D., Burlington, Vermont

3:30 p.m. **Panel Discussion—"New Directions in the Treatment of Stress-Induced Disease"**
Doctors McKegney, Schwab, and Elkes

Kentucky Chapter American College of Surgeons
Ballroom #2—Lexington Center

Moderator:
Sally S. Mattingly, M.D.

1:30 p.m. **"An External Biliary Shunt for Management of Jaundice Due to Unresectable Malignancy"**
M. D. Ram, M.D., Ph.D., Lexington

1:45 p.m. **"Splenectomy vs. Splenic Salvage for the Injured Spleen"**
Susan Miller, M.D., Louisville

2:00 p.m. **"Management of Ocular Trauma"**
William N. Offutt, IV, M.D., Lexington

2:15 p.m. **"Management of Avascular Extremities"**
Thomas W. Wolff, M.D., Louisville

JAMES W. MAY, JR., M.D.
Boston, Massachusetts



Chief, Hand Surgical Service, Division of Plastic Surgery, Massachusetts General Hospital, Boston, MA. M.D., 1969, Northwestern University Medical School. Fellow American College of Surgeons. Member, AMA; Massachusetts Medical Society; Society of Academic Surgeons; International Society of Reconstructive Microsurgery; New England Society of Plastic and Reconstructive Surgeons; American Association for Hand Surgery. Author of numerous publications.

CHARLES S. HIRSCH, M.D.
Cincinnati, Ohio

Director of Forensic Pathology, Hamilton County Institute of Forensic Medicine, Clinical Professor of Pathology at the University of Cincinnati College of Medicine. M.D., 1962, University of Illinois College of Medicine. Member of the American Society of Clinical Pathologists, College of American Pathologists, American Academy of Forensic Sciences, National Association of Medical Examiners, AMA and the Ohio State Medical Association. Board of Editors of the *American Journal of Clinical Pathology, American Journal of Forensic Medicine and Pathology* and *Pathologist*. Author of numerous publications.



HAROLD STANLEY NELSON, M.D.
Aurora, Colorado



Chief, Allergy-Immunology Service, Fitzsimons Army Medical Center, Aurora, Colorado and Clinical Associate Professor of Medicine (Immunology), University of Colorado School of Medicine, Denver. Consultant to the Surgeon General in Allergy. M.D., 1955, Emory University, Atlanta, Georgia. Fellow of the American Academy of Allergy, the American College of Physicians, and the American College of Allergists. Member, American Thoracic Society, Association of Military Allergists and American Association of Immunologists. Author of numerous publications.

WILLIAM MOREAU THOMPSON, M.D.
Durham, North Carolina



Chief, Department of Radiology, Veterans Administration Medical Center, Durham, North Carolina. Associate Professor, Radiology, Duke University Medical Center. M.D., 1969, University of Pennsylvania Medical School, 1980. Awarded Teacher of the Year from Department of Radiology, Duke University Medical Center. Member, American College of Radiology; Radiological Society North America; Association of University Radiologists; American Roentgen Ray Society.

B. KEN GRAY, M.D.
Royal Oak, Michigan



Director, Emergency Department and Ambulatory Services, William Beaumont Hospital, Royal Oak, Michigan. Clinical Instructor, Department of School of Medicine, Michigan State University. M.D., 1965, Kansas University Medical Center, Kansas City, Kansas. President of the American College of Emergency Physicians. Member of the American Academy of Medical Directors; Michigan Emergency Services Health Council; American Association of Poison Control Centers; AMA; Michigan State Medical Society.

PERRY R. AYRES, M.D.
Worthington, Ohio



Staff Internist, Counselor on Substance Abuse and President, Medical Staff, Harding Hospital, Worthington, Ohio. M.D., 1942, Western Reserve University, Cleveland, Ohio. Chairman, Physician Effectiveness Program, Ohio State Medical Association. Editor, *Ohio State Medical Journal*, 1959 to 1974. Member, Ohio State Medical Association; AMA; American Medical Society on Alcoholism; American Medical Writers Association.

2:30 p.m. **Intermission to Visit Exhibits**
Moderator: Charles H. Nicholson, M.D., President, ACS

3:00 p.m. **"Emergency Problems in Endocrine Surgery"**
H. William Scott, Jr., M.D., Nashville, Tenn.

3:30 p.m. **"Current Management of Blunt & Penetrating Rectal Trauma"**
Laddie J. Tackett, M.D., Mt. Sterling

3:45 p.m. **"Diagnosis and Therapy for Traumatic Diaphragmatic Rupture"**
Gary L. Griffith, M.D., Lexington

4:00 p.m. **"L-Rod Spinal Instrumentation in the Treatment of Unstable Thoracolumbar Spine Fractures"**
M. L. Stetten, M.D., Louisville

4:15 p.m. **"Abdominal Aortic Aneurysms and Coronary Artery Disease: A Reassessment"**
Robert A. McCready, M.D., Lexington

4:30 p.m. **"Coronary Artery Surgery and Direct Coronary Artery Thrombolysis During Acute Myocardial Infarction"**
David M. Lolley, M.D., Madisonville

4:45 p.m. **"Post-Traumatic Renal Failure"**
Charles R. Sachatello, M.D., Lexington

Kentucky Urological Association
Meeting Room D—Lexington Center

1:30 p.m. **"Treatment of Prostatic Carcinoma in the Light of V.A. Cooperative Studies"**
Clyde E. Blackard, M.D., Minneapolis, Minn.

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Pyelogram Presentation and Discussion of Interesting Cases"**
Clyde E. Blackard, M.D. + Panel

3:30 p.m. **Business Meeting**

WEDNESDAY, SEPTEMBER 22
MORNING GENERAL SESSION

James A. Baumgarten, M.D., Owensboro, Chairman

8:15 a.m. **Movie**

8:40 a.m. **"Psychiatry in the Emergency Setting"**
F. Patrick McKegney, M.D., Burlington, Vt.

9:00 a.m. **"Immediate Care of Patients Exposed to Radioactive Substances"**
Daniel Teitelbaum, M.D., Denver, Col.

9:20 a.m. **"Emergency Room Evaluation of the Injured Spine"**
Arthur L. Brooks, M.D., Nashville, Tenn.

9:40 a.m. **"Surgical Treatment of Chronic Osteomyelitis of the Lower Extremities"**
James W. May, Jr., M.D., Boston, Mass.

10:00 a.m. **Intermission to Visit Exhibits**

10:30 a.m. **"A Cause of Death vs The Cause of Death"**
Charles S. Hirsch, M.D., Cincinnati, Ohio

10:50 a.m. **"Anaphylaxis—Diagnosis and Treatment"**
Harold S. Nelson, M.D., Aurora, Col.

11:10 a.m. **"Radiological Evaluation of the Acute Abdomen"**
William Thompson, M.D., Durham, N.C.

Annual Meeting Program

11:30 a.m. **"The Epidemiology of Emergency Medicine"**
B. Ken Gray, M.D., Royal Oak, Mich.

PRESIDENT'S LUNCHEON
Patterson Ballroom
Hyatt Conference Center
11:50 a.m.

Ballard W. Cassady, M.D., Pikeville
KMA President, Presiding

Invocation
Recognition
Awards Presentation

S. Randolph Scheen, M.D., Louisville
Chairman, KMA Awards Committee

Luncheon Speaker

James H. Sammons, M.D.
Executive Vice President, AMA

Installation of the New KMA President

WEDNESDAY, SEPTEMBER 22
AFTERNOON GENERAL SESSION

David L. Stewart, Louisville
Chairman, KMA Impaired Physicians Committee

KMA Scientific Program Committee, Presiding

2:30 p.m. **"Be Your Brother's Keeper"**
Perry R. Ayres, M.D., Worthington, Ohio
3:00 p.m. **Intermission**
3:30 p.m. **"Chemical Addiction"**
Joseph A. Pursch, M.D., Orange, Calif.
4:30 p.m. **Question and Answer Period**
Perry R. Ayres, M.D.
Joseph A. Pursch, M.D.

JOSEPH A. PURSCH, M.D.
Long Beach, California



Corporate Medical Director Comprehensive Care Corporation, Orange, California. Special Assistant to Navy Surgeon General on Alcoholism. M.D., 1959, Indiana University School of Medicine. Member, Editorial Board for Alcoholism Clinical and Research Studies, *The Official Journal of The American Medical Society on Alcoholism* (AMSA). Fellow of American Psychiatric Association; Aerospace Medical Association. Member of the AMA; Association of Military Surgeons.

DONALD M. DITMARS, JR., M.D.
Detroit, Michigan

Clinical Assistant Professor, University of Michigan, 1970 to 1981. Staff Surgeon Division of Plastic Surgery M.D., Henry Ford Hospital, Detroit. M.D., 1960 Cornell University Medical College, New York City, New York. Member, American College of Surgeons; AMA; Detroit Surgical Association American Society for Surgery of the Hand. Past President Michigan Academy of Plastic Surgeons, former Director American Association for Hand Surgery.

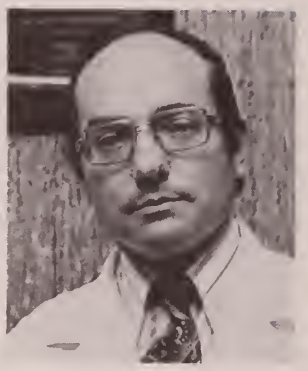


B. LESLIE HUFFMAN, JR., M.D.
Grand Rapids, Ohio



Clinical Professor, Medical College of Ohio, Toledo. Private practice of Family Medicine in Toledo and Maumee, OH. M.D., 1954, Vanderbilt University. Fellow, past president of American Academy Family Physicians. Past president Ohio Academy of Family Physicians. Member, Family Health Foundation of America; AMA; Toledo/Lucas Academy of Family Physicians. Member, Academy of Medicine, Toledo/Lucas County.

PETER ROBERT LAIBSON, M.D.
Philadelphia, Pennsylvania



Associate Professor of Ophthalmology, Temple University School of Medicine, Philadelphia. Professor of Ophthalmology, Jefferson Medical College of Thomas Jefferson University, Philadelphia. Director and Attending Surgeon, Wills Eye Hospital, Philadelphia. M.D., 1959, State University of New York. Member of the American Academy of Ophthalmology and Otolaryngology, the American Ophthalmological Society, Pennsylvania Academy of Ophthalmology and Otolaryngology, the Ocular Microbiology and Immunology Group, AMA, and the Association for Research in Vision and Ophthalmology.

ALDRED E. BUXTON, M.D.
Villanova, Pennsylvania

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Assistant Professor of Medicine, Hospital of the University of Pennsylvania, Philadelphia, PA. M.D., 1973, University of Pennsylvania School of Medicine. Measey Foundation Fellow, University of Pennsylvania, Department of Medicine. Member, American College of Physicians; American Heart Association; American Federation for Clinical Research. Author of numerous publications.

MICHAEL V. SIVAK, JR., M.D.
Cleveland, Ohio



Head, Section of Gastrointestinal Endoscopy, Department of Gastroenterology, Cleveland Clinic. M.D., 1969, Hahnemann Medical College, Philadelphia, PA. Member, American Society Gastrointestinal Endoscopy; Northwestern Ohio Society Gastrointestinal Endoscopy; AMA. Author of numerous publications.

THURSDAY, SEPTEMBER 23

MORNING GENERAL SESSION

R. J. Phillips, M.D., Owensboro
Vice Chairman, KMA
Board of Trustees Presiding

8:15 p.m. **Movie**

9:00 a.m. **"Industrial Injuries of the Hand"**
Donald Ditmars, M.D., Detroit, Mich.

9:20 a.m. **"Treatment of Acute Emergencies in Your Office"**
B. Leslie Huffman, M.D., Grand Rapid, Ohio

9:40 a.m. **"Management of the Acutely Infected Eye"**
Peter R. Laibson, M.D., Philadelphia, Pa.

10:00 a.m. **Intermission To Visit Exhibits**

10:30 a.m. **"Sudden Cardiac Death"**
Alfred E. Buxton, M.D., Philadelphia, Pa.

10:50 a.m. **"The Role of Endoscopy in Gastrointestinal Hemorrhage"**
Michael V. Sivak, Jr., M.D., Cleveland, Ohio

11:10 a.m. **"Urgent Treatment Problems in Clinical Dermatology"**
Robert W. Goltz, M.D., Minneapolis, Minn.

11:30 a.m. **"Management of the Patient with Severe Facial Fractures"**
Charles W. Gross, M.D., Memphis, Tenn.

AFTERNOON SESSION

Specialty Group Meetings

Kentucky Society of Allergy and Clinical Immunology
Meeting Room F—Lexington Center

1:30 p.m. **"Atopy: Review of Classic Studies"**
Harold S. Nelson, M.D., Denver, Colo.

2:00 p.m. **"Occupational Asthma"**
Harold S. Nelson, M.D.

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Clinical Evaluation of Fluocortyn-butyl, A Topical Nasal Steroid, in Seasonal Allergic Rhinitis"**
Indar Jhamb, M.D., Louisville

3:30 p.m. **"Immunotherapy in Allergic Asthma"**
Harold S. Nelson, M.D.

Kentucky Dermatological Society
Lexington Clinic—3rd Floor, Dermatology Section

1:30 p.m. **Clinical Case Presentations**

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **Discussion of Cases**
Robert W. Goltz, M.D., Minneapolis, Minn.

Kentucky ENT Society
Meeting Room B—Lexington Center

Program to be Announced

Annual Meeting Program

Kentucky Academy of Eye Physicians and Surgeons
Ballroom #2—Lexington Center
Program to be Announced

Kentucky Chapter American Academy of Family Physicians
Meeting Room C—Lexington Center

1:30 p.m. **"The Twenty Minute Hour"**
B. Leslie Huffman, Jr., M.D., Grand Rapid, Ohio

2:00 p.m. **"The American Board of Family Practice and You"**
B. Leslie Huffman, Jr., M.D.

2:20 p.m. **"Inter-hospital Transfer in Eastern Kentucky"**
LTC Charles H. Hood, M.D., Ft. Knox

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Parasites in Kentucky"**
Jerry E. Jones, M.D., M.S., Lexington

3:30 p.m. **"The Role of the Family Practitioner in Eye Care"**
William N. Offutt, IV, M.D., Lexington

Kentucky Society for Gastrointestinal Endoscopy
Ballrooms #3 & #4—Lexington Center

1:30 p.m. **"Diagnosis and Treatment of Caroli's Disease"**
Steve Aaron, M.D., Louisville

2:00 p.m. **"Injection Sclerosis of Esophageal Varices"**
Michael V. Sivak, Jr., M.D., Cleveland, Ohio

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Lasers"**
Robert Overstreet, M.D., Louisville

3:30 p.m. **"Colonoscopic Study of Experimental Colitis"**
Nirmal S. Mann, M.D., Louisville
Laurence Demers, Ph.D., Hershey, Pa.

Kentucky Occupational Medical Association
Meeting Room A—Lexington Center

1:30 p.m. **"Problems with Industrial Hand Injuries"**
Donald Ditmars, Jr., M.D., Detroit, Mich.

2:30 p.m. **Business Meeting**

3:00 p.m. **Intermission to Visit Exhibits**

Kentucky Chapter American College of Physicians
Meeting Room D—Lexington Center

1:30 p.m. **"Newer Aspects of Clinical & Laboratory Features of IgA Nephropathy"**
Bruce A. Julian, M.D., Lexington

2:00 p.m. **"Reentrant Cardiac Arrhythmias"**
Alfred E. Buxton, M.D., Philadelphia, Pa.

2:30 p.m. **Intermission to Visit Exhibits**

3:00 p.m. **"Advances in Management of Upper G.I. Bleeding"**
Richard N. Redinger, M.D., Louisville

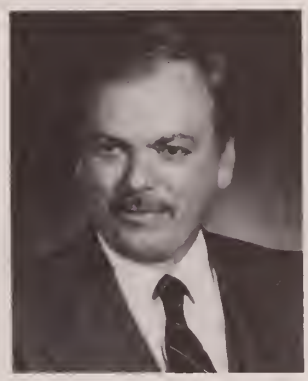
3:30 p.m. **"New Approaches in Treatment of Acute Myocardial Infarction"**
Scott Reader, M.D., Madisonville

ROBERT W. GOLTZ, M.D.
Minneapolis, Minnesota



Professor and Head Department of Dermatology University of Minnesota. Consultant, Surgeon General of the U.S. Air Force. M.D., 1945, University of Minnesota School of Medicine. Past President American Dermatologic Society for Allergy and Immunology. Editor Dermatology Digest. Member American Board of Medical Specialities; Minnesota Coalition on Health Care Costs; Pacific Dermatologic Association.

CHARLES WAYNE GROSS, M.D.
Memphis, Tennessee



Private practice of Otolaryngology, Head and Neck and Facial Plastic Surgery, Memphis, TN. M.D., 1961, University of Virginia Medical School. Fellow, American Academy of Ophthalmology and Otolaryngology; American Academy of Facial Plastic and Reconstructive Surgery; American College of Surgeons; American Society of Head and Neck Surgery; American Academy of Ophthalmology and Otolaryngologic Allergy. Member, AMA; American Council of Otolaryngology; Society of Academic Chairmen of Otolaryngology, Southern Medical Association; Tennessee Medical Association. Author of numerous publications.

Kentucky Association of Public Health Physicians
Meeting Room E—Lexington Center

1:30 p.m. **"Prevention in Medical Emergencies—The Next Public Health Advance"**
B. Ken Gray, M.D., President, ACEP
Royal Oak, Mich.

2:30 p.m. **"Faces in Crashes" (film)**
Insurance Institute for Highway Safety
William Haddon, Jr., M.D., President

2:55 p.m. **Discussion of Film**

3:15 p.m. **Intermission to Visit Exhibits**

3:45 p.m. **Business Meeting**

Summaries of General Sessions Presentations 1982 KMA Annual Meeting

ABRUPTIO PLACENTAE

Preston V. Dilts, Jr., M.D.

Abruptio placentae is premature separation of the normally implanted placenta. It occurs more commonly in multi-gravidas and in patients with vascular diseases such as diabetes, hypertension and pre-eclampsia. It is catastrophic to both mother and baby. For mother it causes hemorrhage, disseminated intervascular coagulation (DIC) with failure to clot, renal cortical necrosis, and possible death. For the fetus it causes immediate diminution or shutdown in its oxygen supply and its ability to transfer out hydrogen ions. Death may result immediately or very quickly.

Diagnosis is gained by a high index of suspicion, pain, bleeding, rigid uterus and depressed heart tones. Treatment is usually immediate cesarean section whether or not blood is available. Vaginal delivery is used only if it can be rapid.

Once delivery is accomplished, the DIC resolves spontaneously, blood can be replaced and the patient should recover without difficulty.

ACUTE ACETAMINOPHEN POISONING

Barry H. Rumack, M.D.

This course will familiarize the participants with the most current information on the incidence, outcome, diagnosis and management of acetaminophen intoxication in the adult and pediatric population. Particular emphasis will be placed on the appropriate use of N-acetylcysteine (Mucomyst(R)) as an oral antidote for acute acetaminophen overdosage, including an update of the national protocol.

ACUTE SCROTAL SWELLING

Clyde E. Blackard, M.D.

The differential diagnosis and management of acute scrotal swelling will be discussed. Acute scrotal swelling is a true emergency. If testicular torsion is the cause, the patient must be operated on immediately. This is important in order to prevent testicular infarction.

PSYCHIATRY IN THE EMERGENCY SETTING

F. Patrick McKegney, M.D.

The management of acute disruptions of behavior in the emergency setting begins with accurate diagnosis and a determination of the organic and psychosocial factors which precipitated the behavioral disorder. Optimal treatment necessitates the specific modification of underlying organic or psychologic disturbances. A person other than the physician can provide security, orientation and support of the patient's attempts at reorganization. Administration of tranquilizers and sedatives must be governed by flexibility in the choice of agent and dosage. The best management depends on careful monitoring of the patient's response to specific and nonspecific biological and psychological interventions.

EMERGENCY ROOM EVALUATION OF THE INJURED SPINE

Arthur L. Brooks, M.D.

Injuries of the spine which are brought to the emergency room present a challenge in evaluation by the physician. The total spine from the cervical throughout the sacral is the site of a multiplicity of injuries, many of which are minor, others are major, and it becomes the responsibility of the first physician who evaluates them to quickly evaluate and protect the individual against subsequent injury relative to diagnostic maneuvers.

The initial encounter is made increasingly difficult by supratentorial changes from either trauma and/or drugs. A quick assessment of the sensorium, motor and sensory activities of the extremities to include reflexes are all important, as is palpation of the spine. X-ray problems will be discussed.

A CAUSE OF DEATH vs THE CAUSE OF DEATH

Charles S. Hirsch, M.D.

The talk distinguishes between causes and mechanisms of death and deals with sudden deaths due to natural causes. The goal is to provide insight into the certainty with which pathological findings establish causes of death.

RADIOLOGIC EVALUATION OF THE ACUTE ABDOMEN

William Moreau Thompson, M.D.

In the past five years the development of CT, ultrasound and newer radioisotope scanning techniques have expanded the modalities available to the radiologists for evaluation of patients with an acute abdomen. Thus the radiologist has been placed in an even stronger position to help evaluate and provide specific diagnoses in patients who are referred with acute abdominal pain. This presentation will discuss the role of the various imaging modalities in most of the more common entities responsible for causing acute abdominal symptoms. Due to time constraints only the adult will be considered in the discussion. The entities which will be discussed are acute cholecystitis, intestinal perforation, intestinal obstruction, intra-abdominal abscess, appendicitis, trauma, and urinary obstruction. Radiographic approach based on recent experience will be outlined in the evaluation of patients with acute abdominal symptoms. Emphasis will be placed on the practical applications of the newer imaging modalities.

BE YOUR BROTHER'S KEEPER

Perry R. Ayres, M.D.

Organized medicine has acknowledged a distinction between "sick" doctors and "bad" doctors and has demonstrated that many of those impaired by psychiatric illnesses, alcoholism, and drug dependency can be identified, treated, and rehabilitated. They generally have a premorbid history of integrity, dedication, and professional competence. Characteristics commonly displayed include emotional isolation, work compulsion, atrophy of normal coping skills, and paralysis of self-perception. A strategy for management entails four roles and five steps. Delineation of the four roles, Patient, Authority, Colleague, and Therapist, must be understood and respected by each participant. The five steps, Identification, Intervention, Treatment, Rehabilitation, and Reentry, must be taken deliberately, in sequence, and with an attitude of firm kindness. The stigma associated with these chronic, progressive, relapsing illnesses impedes treatment. If we can accept our impaired colleagues as sick people, we can reach out to help them just as we might if they had some other debilitating illness. Medicine is a brotherhood, and I am my brother's keeper!

BUZZING TOOLS AND TINGLING HANDS

Donald M. Ditmars, Jr., M.D.

As late as 1972, the relationship of CARPAL TUNNEL SYNDROME to job situations was being denied. The recognition of nerve entrapment syndromes has increased phenomenally during the past decade with carpal tunnel syndrome the overwhelming leader. The association of "chronic stenosing tenosynovitis" (trigger fingers and thumbs) with carpal tunnel syndrome has become evident as the patients developed symptoms of each either separately or together. REPETITIVE forceful flexion of the fingers can elicit the triggering and also the numbness, tingling and night pain in susceptible persons. These symptoms of carpal tunnel syndrome have been abscribed to ischemia of the median nerve due to neural vascular compression in the distal carpal tunnel. We have found that simple division of the transverse carpal ligament gives the best overall results in these typical cases.

In the past three years, chronic VIBRATION has been identified as a physical agent which can affect small blood vessels. This has been associated with tingling and/or painful fingers and also Raynaud's phenomenon. This has been called "Vibration White Finger" and can lead to job and lifestyle changes.

Concomitant with the development of the above concepts, ERGONOMICS has developed as a study of the adjustment of human factors to the operation of machinery. Hand considerations involve both equipment design for prevention and equipment modification for adaptation to limitations following reconstructive surgery and rehabilitation.

MANAGEMENT OF ACUTE EMERGENCIES IN YOUR OFFICE

B. Leslie Huffman, Jr., M.D.

An analysis of the common emergencies encountered in a large group family practice will be presented, based on a review of the total office practice for the past year. Special training of personnel in order to deal effectively with office emergencies will be outlined. Necessary equipment will be discussed. Finally, selected cases will be presented to demonstrate appropriate management.

MANAGEMENT OF THE ACUTELY INFECTED EYE

Peter R. Laibson, M.D.

The acutely infected eye must be managed carefully in any Emergency Room setting first to prevent any further damage to the eye and second to prevent spread of the infection to physicians and nurses and

other patients who may be in contact with the patient. This talk will emphasize the diagnostic approach to these infected eyes and Emergency Room prior to being referred to an Ophthalmologist.

SUDDEN DEATH

Alfred E. Buxton, M.D.

Sudden cardiac death is one of the major problems facing cardiologists and internists today. Although previous work has equated sudden cardiac death with ventricular fibrillation, more recent data accumulated from monitoring studies and programmed stimulation has shed further light on this problem. We will review current status of risk factors and predictors of sudden cardiac death, and discuss indications for and limitations of various techniques used in the treatment of patients with this disorder.

THE ROLE OF ENDOSCOPY IN GASTROINTESTINAL HEMORRHAGE

Michael V. Sivak, Jr. M.D.

The number of episodes of gastrointestinal bleeding per year per 100,000 population is 50 to 150 by conservative estimate. The mortality has remained constant at 10% for the past 40 years. However, the patient population now includes more individuals over 60 years of age, and more with coexistent disease, both factors being associated with an increase in mortality. Thus, the constant mortality figure may actually reflect improved survival for a more challenging group of patients. About 75 to 80% of hemorrhagic episodes stop, either spontaneously or with simple treatment measures, and approximately one quarter of patients do not receive transfusions. However, 15 to 20% will require six or more transfusions, with mortality increasing with the total number of units given. One third of patients who receive 10 or more units will die, one third will sustain serious complications, and emergency surgery will be performed in over one half of cases. Other adverse prognostic factors are recurrent bleeding while hospitalized, and the onset of hemorrhage during hospitalization for other reasons. Roughly 15% of patients overall will undergo operation, the mortality for emergency surgery being 15%. There are no data at present to indicate that endoscopy has significantly altered the morbidity and mortality for gastrointestinal hemorrhage.

The complication rate for emergency endoscopy is 0.9% or three times greater than that for routine diagnostic endoscopy. Its accuracy is greater than 90% in the recognition of actual and potential sources of bleeding, which by far exceeds accuracy for upper gastrointestinal x-rays. While the accuracy and risk are well established, it is more difficult to define the benefit of endoscopy.

Endoscopy can predict outcome. Ongoing hemorrhage or evidence of recent bleeding can be observed in about one third of patients if the procedure is performed within 12 hours of the onset of bleeding (but not necessarily the first 6 hours), these findings being associated with a significant increase in mortality, morbidity, transfusion requirements, and the incidence of emergency surgery. Some lesions such as hemorrhagic-erosive gastritis can be relied upon to be self-limiting, while others such as aorto-duodenal fistula approach 100% mortality without proper management. A prior history of gastrointestinal disorder, peptic ulcer disease for example, predicts the presence of the same lesion with 50% accuracy. Furthermore, multiple potential sources of blood loss are found by endoscopy in one third of patients. Thus, accurate endoscopic diagnosis will not only eliminate unnecessary diagnostic tests, but also ineffectual and/or contraindicated treatment. This is especially important when there are signs of chronic liver disease, where only one half of patients will have bleeding varices. In addition to predicting the need for surgery and guiding certain options in medical management, such as the use of balloon tamponade, endoscopy provides a guide for surgical intervention. The benefit of endoscopy in patients who ultimately undergo surgery (ie. the more critically ill group) has not been studied extensively, although there are some data to suggest an improvement in outcome as a result of accurate preoperative diagnosis.

Finally, the future holds bright possibilities for endoscopic control of gastrointestinal bleeding. Modalities such as electrocoagulation, laser photocoagulation, and injection sclerotherapy for esophageal variceal bleeding are undergoing investigation. While there are significant problems such as cost, effectiveness, differences in technique, and unestablished complication rates, therapeutic endoscopy for control of bleeding promises to be of benefit, perhaps especially so in high risk elderly patients with coexistent disease. For the present, endoscopy will have its greatest benefit in those patients with severe bleeding where surgery is considered in management, and those where different treatment options must be considered, as for example the use of balloon tamponade.

URGENT TREATMENT PROBLEMS IN CLINICAL DERMATOLOGY

Robert W. Goltz, M.D.

The talk will deal with dermatological problems which require immediate, effective management. It includes such things as an acute poison ivy dermatitis, severe flare up of atopic eczema, disseminated viral infections, particularly herpes simplex and herpes zoster, kerion, pyoderma faciale, urticaria and melanomas.

MANAGEMENT OF THE PATIENT WITH SEVERE FACIAL FRACTURES

Charles W. Gross, M.D.

The exact topic of this presentation is "Management of the Patient with Severe Facial Fractures." This will include a discussion of severe trauma to the midface with its evaluation, treatment and possible complications.

AUXILIARY TO THE KENTUCKY MEDICAL ASSOCIATION

PRESENTS

"A BLUEGRASS AFTERNOON"

Tuesday, September 21

11:30 AM Bus Leaves Hyatt High Street Entrance
Tour of Wildcat Lodge

Luncheon & Style Show—Old Towne Inn

Tour of Horse Farm

Historic Downtown Lexington Tour

$15.00 Includes Luncheon, Bus, and Tours

Make check payable to AKMA and return by September 10 to:

Mrs. Martha Jenkins
Registration Chairman
777 Glendover Road
Lexington, KY 40502

Make your reservations now for the 1982 KMA Annual Meeting

(Be sure to indicate you will be attending the Annual Meeting when making your reservations to receive the convention rate.)

HYATT REGENCY LEXINGTON **KENTUCKY MEDICAL ASSOCIATION** **Dial Direct 606-253-1234**
1982 ANNUAL MEETING **SEPTEMBER 19-23, 1982**

Accommodations and Rates

No. Rooms	No. People	Rates
	Single	$57
	Double	$57
	Suites	$150-$350

If all rooms in the requested rate category are already reserved, the next available rate will be assigned. Making your reservation early will assist us in providing the type of room you request.

Date of Arrival_____
Departure_____
Check-in Time: 3:00 p.m.
Check-out Time: 12 Noon
Name_____
Address_____

Names(s) of additional person(s) sharing room

Reservations must be received by AUGUST 30, 1982

Reservations will be held until 6:00 p.m. on day of arrival unless one night's deposit is received, or guaranteed by credit card.

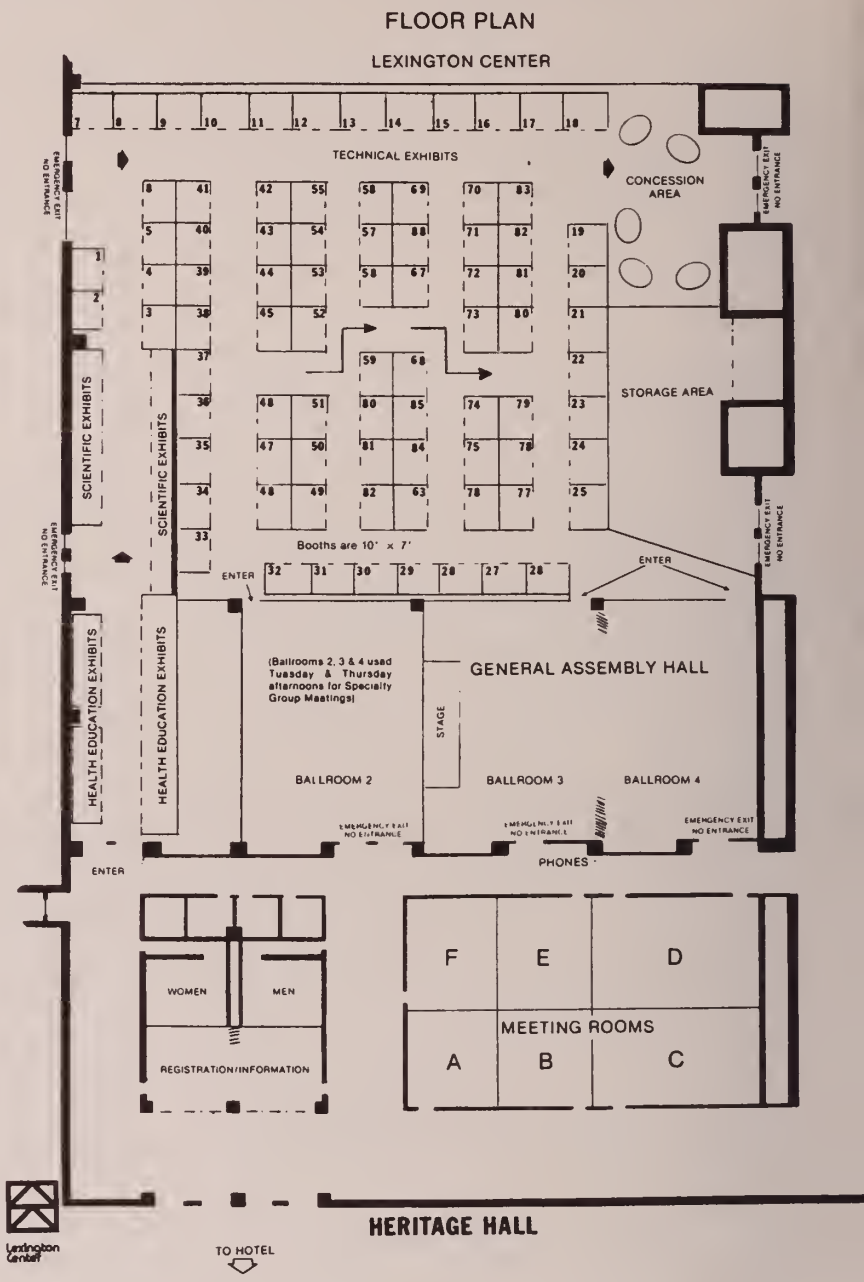
_____ **Hold until 6:00 p.m. only**
_____ **Reserved with deposit of $ _____.**
_____ **Bill my credit card**
American Express #_____
Carte Blanche #_____
Expiration Date_____
Signature_____

Latest Research Advances in Products and Services Offered by 1982 Technical Exhibits

The Technical Exhibits at the 1982 KMA Annual Meeting will feature the latest developments in medical techniques and information. Located in the Lexington Center, the exhibits will condense a volume of information and ideas in such a manner that a vast amount of knowledge can be secured in a short period of time.

Prepared carefully and skillfully to appeal to you, the physician, the exhibits are especially geared to your special interests as a practitioner. Medical representatives and other exhibitors will be on hand to discuss personally their products and services with you. Both you and your patients should benefit from the information that can be gained from a visit to the Technical Exhibits.

Thirty-minute intermissions have been planned during each general and specialty group session so that every physician may take advantage of this excellent opportunity provided by the exhibits.



1982 Technical Exhibitors

Abbott Laboratories (3)
Adria Laboratories, Inc. (22)
Ames Division, Miles Laboratories, Inc. (58)
ASC of Louisville (52)
Ayerst Laboratories (17)

Beecham Laboratories (60)
Berlex Laboratories, Inc. (83)
Blue Cross & Blue Shield & Delta Dental of Kentucky, Inc. (21)
Boehringer Ingelheim, Ltd. (48)
Boots Pharmaceuticals, Inc. (72)
Bork Medical Equipment Co. (65)
Burroughs Wellcome Co. (9)

Capital Creation Co., Inc. (38)
Cardio-Graphics (53)
Carnrick Laboratories, Inc. (68)
Central Pharmaceuticals, Inc. (28)
Coulter Electronics (61)

Datamax Computer Corporation (35)
Division for Disability Determinations (34)
Dorsey Laboratories (76)

Encyclopaedia Britannica (19)
ENDO Laboratories (39)

Flint Laboratories (79)

Geigy Pharmaceuticals (69)
Gerber Products Company (13)
Glaxo, Inc. (32)
Grogan's Inc. (73)
Guild of Prescription Opticians of Kentucky (4)

John Hancock Mutual Life Insurance Company (2)
Hoechst-Roussel Pharmaceuticals, Inc. (80)
Hospital Corporation of America (36)
Humana, Inc. (74)

Info Systems Design Corp. (64)
Insurance Corporation of America (31)
International Clinical Labs of Ky. (66)
International Medical Electronics, Ltd. (67)
Ives Laboratories, Inc. (78)

KEEP/SAFE of Kentucky (30)
Kentucky Medical Insurance Company (15)

Lederle Laboratories (42)
A. P. Lee Agency, Inc. (7)
Eli Lilly and Company (56)

McNeil Pharmaceutical (46)
Marion Laboratories, Inc. (23)
Mead Johnson Nutritional Division (8)
The Medical Protective Company (10)
Merck Sharp & Dohme (5)
Merrill Lynch Pierce Fenner & Smith, Inc. (29)
Metropolitan Life-Medicare Office (24)
Metro Tellecommunications of Kentucky (57)
Miles Pharmaceuticals (37)
Milex Products, Inc. (43)

National Health Laboratories (81)
NCR Corporation (63)

Office Management Systems Div. (82)
Ortho Pharmaceutical Corporation (1)

Pathology and Cytology Laboratories, Inc. (33)
Physicians Planning Services (54)
PICO and PICO Life (16)
Physio-Control Corp. (47)
Professional Accounting Systems (26)
Professional Data Control (44)
Pulse Systems (50)

Q.S.I., Inc. (40)

Ransdell Surgical (70)
A. H. Robins Company (6)
Roche Laboratories (55)
J. B. Roerig (14)
William H. Rorer, Inc. (59)
Ross Laboratories (49)

Sandoz Pharmaceuticals (77)
Clayton L. Scroggins Associates, Inc. (25)
Smith Kline & French Laboratories (18)
Smith Kline & French—Field Research (12)
Southern Medical Association (75)
E. R. Squibb & Sons, Inc. (45)
Stuart Pharmaceuticals (11)

Tab Products Company (20)

USAF Health Professions (71)
U.S. Army Medical Department (62)

Westwood Pharmaceuticals (51)
Whittaker General Medical (27)
Wyeth Laboratories (41)

Technical Exhibits—1982

ABBOTT LABORATORIES, North Chicago, Illinois (Booth No. 3). You are cordially invited to visit the Abbott exhibit which will feature TRANXENE® (clorazepate dipotassium), ERYTHROCIN® (erythromycin), K-LOR™ (potassium chloride for oral solution, USP) and K-TAB™ (potassium chloride, slow-release tablets).

ADRIA LABORATORIES INC., Columbus, Ohio (Booth No. 22). We cordially invite members of the Kentucky Medical Association to visit our exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you, including KAON CL™-10 (potassium chloride), MODANE® and MYOFLEX®.

AMES DIVISION, MILES LABORATORIES, INC., Elkhart, Indiana (Booth No. 58). Stop and "Discover Ames." Find out what's new from the reliable leader of a wide variety of easy-to-use in-vitro medical information systems which include urine chemistry, blood chemistry, immunochemistry, and diabetes management.

Discover Ames new N-MULTISTIX® SG and MULTISTIX® SG which now also measure urine specific gravity. Discover Ames new SERALYZER® System of solid-phase blood chemistries—cost effective, rapid, precise and accurate. Discover Ames TDA® System for the therapeutic drug assays. Discover Ames new GLUCOMETER® for glucose monitoring and diabetes management.

ASC OF LOUISVILLE, Louisville, Kentucky (Booth No. 52).

AYERST LABORATORIES, New York, New York (Booth No. 17). Our Representatives look forward to a visit with you, and for the opportunity to discuss the Ayerst products and services of interest to you.

BEECHAM LABORATORIES, Bristol, Tennessee (Booth No. 60). Beecham Laboratories' exhibit will concentrate on our major promoted products, AMOXIL®, FASTIN®, TIGAN®, NUCOFED®, and TICAR®. New package sizes for AMOXIL and FASTIN will be displayed, and complete prescribing information on TICAR will be available at the exhibit.

BERLEX LABORATORIES, INC., Cedar Knolls, New Jersey (Booth No. 83). Berlex Laboratories, Inc., cordially invites you to visit our booth where we will be featuring

ELIXOPHYLLIN® (theophylline) SR Capsules as well as DECONAMINE® (chlorpheniramine maleate/d-pseudoephedrine HCl) Capsules, Tablets and Liquid.

Our representatives in attendance will answer any questions you may have regarding these and our other fine products. Requests for samples will be taken.

BLUE CROSS AND BLUE SHIELD AND DELTA DENTAL OF KENTUCKY, Louisville, Kentucky (Booth No. 21). The 1982 Blue Cross and Blue Shield exhibit will offer physicians the opportunity to meet with representatives of the Provider and Professional Relations Division. Our representatives will be present at the booth to answer any questions you may have.

BOEHRINGER INGELHEIM, LTD., Ridgefield, Connecticut (Booth No. 48). Boehringer Ingelheim will feature the following products: Catapres® (clonidine hydrochloride), Combipres® (clonidine hydrochloride 0.1 mg or 0.2 mg and chlorthalidone 15 mg), Alupent® (metaproterenol sulfate) in its many dosage forms, Respbid™, brand of theophylline, Dulcolax® (bisacodyl), Serentil® (mesoridazine) as the beyslate, Torecan® (thiethylperiazine), Persantine® (dipyridamole) and Preludin® (phenmetrazine hydrochloride). Representatives will be on hand to answer questions about our pharmaceutical products.

BOOTS PHARMACEUTICALS, INC., Shreveport, Louisiana (Booth No. 72). At the 1982 Annual Meeting of the Kentucky Medical Association, Boots Pharmaceuticals, Inc. will be featuring Rufen® and Lopurin®. Representatives will be on hand to answer questions about these or any of our other ethical pharmaceuticals.

BORK MEDICAL EQUIPMENT CO., Louisville, Kentucky (Booth No. 65).

BURROUGHS WELLCOME CO., Research Triangle Park, N.C. (Booth No. 9). Representatives of Burroughs Wellcome Co. cordially invite you to visit our booth where our exhibit will feature the latest product information available from us and provide educational material of interest to all physicians. We will be pleased to answer your inquiries on any products of interest to members and guests.

CAPITAL CREATION COMPANY, INC., Lexington, Kentucky (Booth No. 38). The primary purpose of Financial Planning is to: coordinate your assets and provide direction; coordinate advice given by different professionals; and, coordinate the preceeding with where you are now financially and where you want to be in the future. Services provided are frequently quite diversified but are aimed at retaining and increasing your income and assets. Examples of services are: developing a financial plan, estate planning and conservation, tax shelters for deferred income, and tax savings concepts.

CARDIO/GRAPHICS, Nashville, Tennessee (Booth No. 53). Our company offers a Holter Monitoring scan service and transtelephonic pacemaker evaluations. The ICR recorder, hook-up kits and all equipment necessary for each 24 hour tape are provided, at NO CHARGE, to hospitals, clinics, and private physicians. The tapes are sent to our office for scanning and within 24 hours the physician receives a report by phone. Pacemaker patients call our office, toll-free, for monthly evaluation of pacemaker function.

CARNRICK LABORATORIES, INC., Cedar Knolls, New Jersey (Booth No. 68). Presenting our pharmaceutical items: MIDRIN, NOLAMINE, PHRENILIN, PROPAGEST, NOLAHIST, etc., plus ROCHE DIAGNOSTICS PREGNANCY TESTS: SENSI-TEX and SENSI-SLIDE. Copies of the CARNRICK CLASSIFIED will be available at our booth.

CENTRAL PHARMACEUTICALS, INC., Seymour, Indiana (Booth No. 28). Central Pharmaceuticals, Inc., cordially invites you to visit our exhibit where NIFEREX products will be featured. NIFEREX represents a unique approach to oral iron therapy and challenges the old rusty iron standards by which iron therapy has been judged. Stop by and let our technical representatives show you that taking the "ion" out of iron increases safety, efficacy and patient acceptance.

DATAMAX Computer Corporation, an Authorized DIGITAL Computer Distributor, Owensboro, Kentucky (Booth No. 35). We will exhibit and demonstrate a cost effective way to operate the Administrative requirements of a medical practice. The demonstration will feature a Mini-Computer and Applications Software to manage the receivables, insurance preparation, billings and collections management functions of a practice.

DISABILITY DETERMINATIONS FOR SOCIAL SECURITY, Frankfort, Kentucky (Booth No. 34). Under an agreement with the Dept. of Health & Human Services, we prepare Social Security & Supplemental Security Income disability determinations on Kentucky applicants. Our exhibit is staffed by members of our medical staff and disability examiners—both of whom are actively involved in adjudicating claims filed for disability benefits. We will be available to answer questions, explain criteria and talk to physicians interested in helping us evaluate over 25,000 claims per year.

DORSEY LABORATORIES, Lincoln, Nebraska (Booth No. 76). Dorsey Laboratories invites you to stop by our exhibit where our representative(s) will be pleased to provide information on HYDERGINE® (ergo mesylate) and on educational materials that we have available.

ENCYCLOPAEDIA BRITANNICA, Chicago, Illinois (Booth No. 19). As part of our exhibit, we will have on display, the 30-volume Encyclopaedia Britannica 3 and other related educational publications. These publications are available to members and guests at the exhibit. Stop and visit with us in Booth #19.

ENDO LABS./DUPONT, Wilmington, Delaware (Booth No. 39). Endo invites all attendees to stop by our booth for full prescribing information on any of the products we make available to the medical community. Endo's product-line includes: NUBAIN®, SYMMETREL®, COUMADIN®, PERCODAN®, PERCOCET®, MOBAN®, NARCAN®, HYCODAN®, HYCOMINE®, TESSALON® & PERCOGESIC®.

FLINT LABORATORIES, Deerfield, Illinois (Booth No. 79). The Flint booth will feature SYNTHROID® (levothyroxine sodium), SYNTHROID® Injection, CHOLOXIN® (dextrothyroxine sodium), TRAVASE® Ointment (brand of Sutilains) and Flint Silver Sulfadiazine Cream.

GERBER PRODUCTS COMPANY, Fremont, Michigan (Booth No. 13). You are cordially invited to visit the Gerber display. Meat Base Formula, NUK Products, humidifiers/vaporizers, safety items, patient booklets and a broad selection of Gerber Baby Foods will be featured. Our Medical Marketing Representative will be happy to discuss our products and services with you.

GEIGY PHARMACEUTICALS, Summit, New Jersey (Booth No. 69). We ask you to stop by our booth to discuss any product in our pharmaceutical line that is of interest to you.

Technical Exhibitors

GLAXO INC., Ft. Lauderdale, Florida (Booth No. 32). Our representatives will be on hand to discuss the latest clinical information on VENTOLIN and BECLOVENT Inhalers in the treatment of respiratory diseases, and also to discuss BECONASE Nasal Inhalers in the treatment of seasonal and perennial rhinitis.

GROGAN INC., Lexington, Kentucky (Booth No. 73). Stop by and say Hello! We will be showing the latest in medical and office supplies, and will be happy to see you.

GUILD OF PRESCRIPTION OPTICIANS OF KENTUCKY, Louisville, Kentucky (Booth No. 4). Eyeglasses Adjusted—visit our booth to have your eyeglasses properly adjusted for maximum comfort and visual benefit. Minor repairs also can be made on the spot. Free Distance and Near Vision test cards, for use by the general practitioner, are offered. Your Guild Optician works closely with the ophthalmologist to provide the best in visual aid appliances. Support the Eye Physician Guild Optician type of eye services for better eye care.

JOHN HANCOCK MUTUAL LIFE INSURANCE CO., Louisville, Kentucky (Booth No. 2). John Hancock sells all types of Life Insurance—including our new product, the Variable Whole Life Insurance Contract. And Remember, "WE SERVICE WHAT WE SELL."

HOECHST-ROUSSEL PHARMACEUTICALS, INC., Somerville, New Jersey (Booth No. 80). The Hoechst-Roussel Pharmaceuticals Inc. display will feature Claforan® (cefotaxime sodium) Sterile, the first of a new generation of cephalosporins. Stop by our booth for information on Claforan's® expanded clinical versatility. Claforan®, now even more remarkable.

HOSPITAL CORPORATION OF AMERICA, Nashville, Tennessee (Booth No. 36). The Professional Relations Office of Hospital Corporation of America offers a free, no obligation physician placement service to physicians interested in locating their practices in one of the 350 communities served by HCA facilities that is in need of additional physicians.

HCA Kentucky Hospital locations include: Bowling Green, Flemingsburg, Frankfort, Franklin, Greenville, Lebanon, Mayfield, Morganfield, Paris, Russellville & Maysville.

HUMANA INC., Louisville, Kentucky (Booth No. 74). Louisville-based Humana is a multi-national hospital company. We own and operate 88 hospitals in 22 states, including five in Kentucky, and two foreign countries. Physicians are needed in Louisville, Somerset, and Louisa. Stop by our booth and discuss these attractive private practice opportunities.

INFOSYSTEMS DESIGN, CORP., Louisville, Kentucky (Booth No. 64). InfoSystems Design Corporation provides computer based Medical Practice Management systems for physicians and clinics. Our systems provide patient billing, third party billing, practice analysis, general ledger and accounts payable functions for specialists and general practitioners.

INSURANCE CORPORATION OF AMERICA, Houston, Texas (Booth No. 31). ICA specializes in professional liability coverage for physicians. Admitted in 30 states, ICA continues to be one of the nation's fastest growing writers of this coverage. According to A. M. Best Company, ICA has moved from a ranking of 48th to 35th among companies that write medical malpractice.

ICA writes the Occurrence policy for physicians exclusively. The underwriting philosophy is physician oriented and physician controlled. Dr. Doyle N. Rogers is Chairman of the Board and Richard Cross is the President.

INTERNATIONAL CLINICAL LABS OF KENTUCKY, Lexington, Kentucky (Booth No. 67).

INTERNATIONAL MEDICAL ELECTRONICS, LTD., Kansas City, Missouri (Booth No. 67). International Medical Electronics, Ltd., manufacturers of sophisticated medical equipment, featuring MAGNATHERM shortwave diathermy with two detachable heads. Offering the ability to treat two separate areas or one from two directions at the same time. Please stop by Booth #67 for a demonstration.

IVES LABORATORIES INC., New York, New York (Booth No. 78). We will be featuring the interesting benefits of our new tricyclic antidepressant, SURMONTIL® (trimipramine maleate).

We will also be available to discuss the family of ISORDIL® (isosorbide dinitrate) products, meeting the needs of each patient with angina pectoris.

In addition, we will feature CYCLOSPASMOL® (cyclandelate) a peripheral and cerebral vasodilator, and SYNALGOS®-DC, the "sedative"-analgesic.

Representatives will be happy to discuss these products and other IVES specialties with you.

KEEP/SAFE OF KENTUCKY, Anchorage, Kentucky (Booth No. 8). Seller of Fireproof Safes & Files.

KENTUCKY MEDICAL INSURANCE COMPANY, Louisville, Kentucky (Booth No. 15). Kentucky Medical Insurance Company, organized by the Kentucky Medical Association, is a professional liability insurance company owned by physicians, run by professionals, with physician input in all areas in which there is need of physician expertise. We welcome the opportunity to discuss the advantages and benefits represented by our program of coverage.

LEDERLE LABORATORIES, Pearl River, New York (Booth No. 42). We invite you to visit our booth where Lederle representatives will provide information on PIPRACIL™ piperacillin sodium, a new parenteral semisynthetic penicillin with potent broad-spectrum bactericidal activity against gram negative, gram positive aerobic and anerobic pathogens associated with uncomplicated and serious infection, and ASENDIN® amoxapine, recently released, indicated in the relief of symptoms due to depression and characterized by rapid onset of action.

A. P. LEE AGENCY, Louisville, Kentucky (Booth No. 7). This agency, which has been administering professional disability income for physicians in Kentucky since 1939—as well as the other major professional groups—manages our officially endorsed program. This is the only disability insurance program endorsed by the Kentucky Medical Association for its members. The Phoenix Assurance Company underwrites the plan. Rates are very competitive, and, with the various plans offered, coverages can be tailor-made to your needs. The local service is of prime importance.

ELI LILLY AND COMPANY, Indianapolis, Indiana (Booth No. 56). We cordially invite you to visit our exhibit. Our sales representatives in attendance will welcome your questions about our pharmaceutical products.

MARION LABORATORIES, INC., Kansas City, Missouri (Booth No. 23). We are proud to be in attendance again this year, and hope you will stop by to meet our representatives and let them answer your questions about any of our fine pharmaceutical products. We are anxious to introduce you to our newest, exciting product, CARAFATE® (sucralfate).

Technical Exhibitors

MEADE JOHNSON NUTRITIONAL DIVISION, Evansville, Indiana (Booth No. 8). We cordially invite you to visit the Mead Johnson Nutritional Division exhibit and meet our local representatives who will welcome the opportunity to discuss products and services of interest to you. Featured will be ENFAMIL, PROSOBEE, and adult nutritional products.

THE MEDICAL PROTECTIVE COMPANY, Fort Wayne, Indiana (Booth No. 10). As befits the First Company in the professional liability field, The Medical Protective Company, provides unexcelled protection in any claim for damages based on professional services rendered or which should have been rendered. The Company's experience from the successful handling of over 130,000 claims during eighty-two years of Professional Protection Exclusively is unparalleled in the professional liability field.

MERCK SHARP & DOHME, West Point, Pennsylvania (Booth No. 5). Merck Sharp & Dohme cordially invites you to visit their exhibit featuring several products from their extensive line of pharmaceuticals. Representatives in attendance will be pleased to answer any questions you may have. Inquiries about our professional, informational, and educational services are welcomed.

MERRILL LYNCH, PIERCE, FENNER AND SMITH INC., Ashland, Lexington and Louisville, Kentucky (Booth No. 29). Merrill Lynch, Pierce, Fenner and Smith Inc., a member of the New York Stock Exchange and numerous other major security and commodity exchanges, will have several of its Account Executives available to answer any questions regarding its revolutionary Cash Management Account® or any other investment services which are offered by Merrill Lynch.

METROPOLITAN LIFE INSURANCE COMPANY—MEDICARE OFFICE, Lexington, Kentucky (Booth 24). Representatives from the Carrier will be in attendance at the booth to provide physicians with information and the opportunity to discuss questions regarding the administration of Part B of Medicare in Kentucky.

METRO TELECOMMUNICATIONS, Lexington, Kentucky (Booth No. 57). We are a licensed Radio Common Carrier operating an interconnected communications company at the above address. Our products are Pagers, Beepers, and Mobile Telephones. The Products are manufactured by Motorola Communications.

We provide an Answering Service and Medical Exchange that operates 24 hours everyday.

MILES PHARMACEUTICALS, West Haven, Connecticut (Booth No. 37). Miles Pharmaceuticals cordially invites you to visit their exhibit featuring its new injectable antibiotic (mezlocillin sodium for IV/IM use) marketed under the brand name MEZLIN™. MEZLIN™ is the first of a new generation of semisynthetic penicillins, the acylureidopenicillins. Also featured will be MYCELEX-G, MYCELEX, and TRIDESILON products. On display will be THE MILES LEARNING CENTER™, a laser videodisc system providing the very latest in self instructional equipment for continuing medical and nursing education. Representatives in attendance welcome your questions about MILES PHARMACEUTICAL products. MEZLIN a new force in theraputic progress now in the American market from MILES PHARMACEUTICALS, is parented by the company responsible for the pioneering of antibiotics.

MILEX PRODUCTS, INC. Chicago, Illinois (Booth No. 43). Milex will feature uterine suction curettes with a unique TIS-U-TRAP for cancer screening and periodic monitoring of higher risk patients. Other devices used for Dysmenorrhea, Stenosis, Prolapse will be shown. Milex also features a series of educational books for your patients to save you valuable office time.

NATIONAL HEALTH LABORATORIES, INCORPORATED, Louisville, Kentucky (Booth No. 81). National Health Laboratories, Incorporated (NHL) offers full service clinical and anatomical laboratory services to area physicians, hospitals, clinics and other medical facilities. Locally, N.H.L. offers these services through fourteen laboratory locations which benefit from the direction of fourteen board certified pathologists.

N.H.L. also offers specialized services in the areas of Cytopathology, Anatomical Pathology and Dermatopathology.

N.H.L.'s booth will highlight its capabilities in the areas of rapid electronic test result delivery, state of the art technology and reliable local service.

NCR CORPORATION, Lexington and Louisville, Kentucky (Booth No. 63). Our representatives welcome the opportunity to answer your questions concerning the NCR computers and Medical Management System programs for doctors and clinics ranging from a solo practice through the largest multi-specialty groups. Specific applications include: patient and third-party billing and statements, missed appointment and fee slip reporting, chart location and refile reports, delinquent balance reports, production reports; patient recall, collection, payment plan, scheduling, hospital ATD, prescription and medical database subsystems.

OFFICE MANAGEMENT SYSTEMS DIVISION, Louisville, Kentucky (Booth No. 82). The medical system has been designed to provide the small to medium sized clinic with an economical means for processing patient billing, and control the office schedule. The system will print the monthly statements, fill out insurance forms required and generate reports on ICDA and CPT usage. These accurate and professional quality documents are prepared in a fraction of the time for manual preparation. These systems are backed by on-site training and service support.

ORTHO PHARMACEUTICAL CORPORATION, Raritan, New Jersey (Booth No. 1). Ortho Pharmaceutical Corporation will present the most complete line of medically accepted products for conception control and the treatment of vaginitis. IMODIUM for the control and treatment of acute or chronic diarrhea will also be featured.

PATHOLOGY AND CYTOLOGY LABORATORIES, INC., Lexington, Kentucky (Booth No. 33). We provide laboratory services for physicians, clinics, and nursing homes throughout the State of Kentucky. The laboratory is directed by pathologists. We have a branch laboratory in Ashland, Kentucky.

Our goal is to provide the highest quality of services at the lowest possible price.

PHYSICIANS PLANNING SERVICE CORPORATION, Louisville and Lexington, Kentucky (Booth No. 54). We will explain and pass out brochures on benefits of belonging to the *National Association of Residents and Interns and the *American Professional Practice Association. (*A not-for-profit organization).

PICO LIFE INSURANCE COMPANY, Pickerington, Ohio (Booth No. 16). PICO Life specializes in life and health insurance and financial planning services for professional individuals and corporations. The company's product portfolio includes a comprehensive line of individual and group life insurance programs, featuring an innovative universal life plan, PICO LIFESTYLE 1. PICO Life also provides disability protection and a superior line of qualified and non-qualified retirement plans. PICO Life's products

and services are offered through the KMA Insurance Agency, Inc. and selected representatives statewide.

PHYSIO-CONTROL CORPORATION, Worthington, Ohio (Booth No. 47). Portable acute cardiac care systems, defibrillators, ECG monitors, central monitoring systems, blood pressure monitors, and related accessories.

PROFESSIONAL ACCOUNTING SYSTEMS, Louisville, Kentucky (Booth No. 26). Leading the industry in: SuperBill Accounting, Color-Coded Filing, Micro-Filming Services, Office Furniture and Decor. A decade of trust in Office Efficiency Products. John and Barbra Test, Consultants.

PROFESSIONAL DATA CONTROL, INC., Louisville, Kentucky (Booth No. 44). The experience of many physicians demonstrates the effectiveness of PDC's Medabase Mark V System, On-Line real time or In-House computer service for major improvement of cash flow and collections. Fast easy to learn data entry by a medical assistant without computer knowledge. Weekly billing and all health insurance forms printed automatically. Live exhibition of Medabase Mark V system's versatility.

PULSE® SYSTEMS A DIVISION OF CHARLES LEICH & CO., Evansville, Indiana (Booth No. 50). Pulse® Systems markets the PULSE® MEDICAL SYSTEM a computer system for the management of medical practioners office. The PMS® handles all the daily functions that a dentist or physician would perform in his office. These include appointment scheduling, accounts receivable, third party billing, daily cash payment posting and the necessary daily reports for the efficient management of today's medical office.

QSI, INC., South Bend, Indiana (Booth No. 40). QSI has the best *LOW COST MICROFILM BILLING SERVICE.* We are also the largest billing service for Doctors in the Midwest, mailing over 500,000 Doctor's statements each month.

QSI is a leader in custom designed *SUPER BILLS* eliminating Doctors Insurance Claim problems.

RANSDELL SURGICAL, Louisville, Kentucky (Booth No. 70). Ransdell Surgical will offer a display of exclusive electronics products all of which are applicable to the private office practice of physicians. We will additionally show new disposables for the first time at this meeting.

A. H. ROBINS COMPANY, Richmond, Virginia (Booth No. 6). You are cordially invited to visit the A. H. Robins exhibit and meet our representatives who will welcome the opportunity to discuss products of interest with you.

ROCHE LABORATORIES, Nutley, New Jersey (Booth No. 55).

J. B. ROERIG, New York, New York (Booth No. 14). Cefobid, (cefoperazone), a new broad spectrum antibiotic will be featured.

WILLIAM H. RORER, INC., Fort Washington, Pennsylvania (Booth No. 59). Our professional representatives are pleased to be part of this medical meeting. They will gladly discuss with you our Rorer line of pharmaceutical products: PERDIEM™, MAALOX®, MAALOX® PLUS, ASCRIPTIN®, GEMNISYN™ and our other products.

Also, its various pharmaceutical specialties manufactured by Dooner Laboratories: SLO-PHYLLIN®, THEOPHYLLINE (anhydrous) and FEDAHIST®, an antihistamine decongestant.

ROSS LABORATORIES, Columbus, Ohio (Booth No. 49). Ross Laboratories, makers of SIMILAC® With Iron Infant Formula, ISOMIL® Soy Protein Formula, and RONDEC® TR invite you to stop by our exhibit. Our representatives will be available to demonstrate our new "snip-off" label which gives formula preparation instructions in both Spanish and pictograms.

SANDOZ PHARMACEUTICALS, East Hanover, New Jersey (Booth No. 77). Sandoz Pharmaceuticals invites you to stop by our exhibit where our representative(s) will be pleased to provide information on our products or on educational materials that we have available.

CLAYTON L. SCROGGINS ASSOCIATES, INC., Cincinnati, Ohio (Booth No. 25). Professional practice management and financial planning for doctors exclusively. Currently over 800 active clients. Hospitals find providing our services to a new physician is an attractive benefit. Staff of over 140 qualified, experienced people providing impartial counsel in a professional, comprehensive and confidential manner. Individualized determination of each client's needs on a fee-for-service basis, offering total objectivity on which our reputation depends. Services throughout Kentucky, Ohio and Indiana.

SMITH KLINE & FRENCH LABORATORIES, Philadelphia, Pennsylvania (Booth No. 18). We will feature TAGAMET (brand of cimetidine). TAGAMET is indicated in the short-term treatment of active duodenal ulcer; in prophylactic use at reduced dosage to prevent recurrent duodenal ulcer in patients likely to need surgical treatment; and in the treatment of pathological hypersecretory disorders.

SMITH KLINE & FRENCH, FIELD RESEARCH, Philadelphia, Pennsylvania (Booth No. 12). We will be conducting a communications research project.

SOUTHERN MEDICAL ASSOCIATION, Birmingham, Alahama (Booth No. 75). On display will be information concerning the advantages of membership in Southern Medical, as well as information on our CME programs, such as the Dial Access System, SMA Telecourse System, the Regional Seminars, Leadership Conferences, Annual Scientific Assemblies, and the SOUTHERN MEDICAL JOURNAL. Stop by our booth and receive a free gift.

E. R. SQUIBB & SONS, INC., Princeton, New Jersey (Booth No. 45). We have long been a leader in the development of new therapeutic agents and equipment for the prevention & treatment of diseases. You are cordially invited to meet our representatives who will be available at our exhibit to discuss our full line of products, including CORGARD® and CAPOTEN®.

STUART PHARMACEUTICALS, Wilmington, Delaware (Booth No. 11). STUART PHARMACEUTICALS welcomes members and guests to the KENTUCKY MEDICAL ASSOCIATION. We extend a cordial invitation to visit our exhibit featuring displays and literature for our new beta blocker, TENORMIN® (atenolol). Our representatives will be glad to answer any questions on STUART products and accept sample requests.

TAB PRODUCTS COMPANY, Louisville, Kentucky (Booth No. 20). Filing systems for the general office and computer room, a recently introduced "Smart" terminal and a line of computer accessory products to store or handle computer media.

UNITED STATES AIR FORCE—HEALTH PROFESSIONS, Nashville, Tennessee (Booth No. 71). The Air Force has one of the best health care systems in our nation. It offers many unusual professional and

personal opportunities. Among many advantages is the freedom to concentrate on the practice of medicine. Physicians are supported by a team of trained associates. Our health care team is comprised of people dedicated to the ideals which have made America great. We believe the Air Force is a great way of life!

US ARMY MEDICAL DEPARTMENT (Booth No. 62). Physician Placement Service for the entire US Army Medical Department. We will be providing information about the Health Professions Scholarship Program for medical students, about Internship/Residency/Fellowship opportunities, and the plethora of placement opportunities for physicians in all specialties.

WESTWOOD PHARMACEUTICALS, Buffalo, New York (Booth No. 51). Westwood Pharmaceuticals welcomes you to the 1982 KMA Annual Meeting. Our exhibit will feature our fine line of dermatological products including Alpha Keri® therapeutic bath oil, Keri® Lotion, Westcort® nonfluorinated steroid, Eurax® scabicide, and PreSun® 15 sunscreen. We will have technical information available at our booth, and our professional representatives would welcome your visit.

WYETH LABORATORIES, Philadelphia, Pennsylvania (Booth No. 42). LO/OVRAL®. Each tablet contains 0.3 mg norgestrel with 0.03 mg ethinyl estradiol. OVRAL®. Each tablet contains 0.5 mg norgestrel with 0.05 mg ethinyl estradiol. ATIVAN® (lorazepam), IV Wyeth. CYCLAPEN®-W (cyclacillin) Wyeth. TUBEX® Closed Injection System, Wyeth, is the largest line of prefilled small-volume injectables available.

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The KMA has approved this program for 15½ hours Category 1 Credit. The KMA is accredited by the Accrediting Council for Continuing Medical Education (ACCME) to sponsor continuing medical education for physicians. The specialty groups at the Annual Meeting are approved for Category 1 Credit. The total number of actual hours offered to physicians at the Annual Meeting will be in excess of 60 hours. Maximum number of hours a physician may obtain for three days attendance is 15½. Hours are determined by actual time at presentations, more than 15 minutes is rounded to the nearest half hour and more than 45 minutes is rounded to the next full hour.

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succeeds

Bactrim is useful for the following infections when due to susceptible strains of indicated organisms (see indications section in summary of product information):

Expanding its usefulness in antimicrobial therapy



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in acute otitis media in children...
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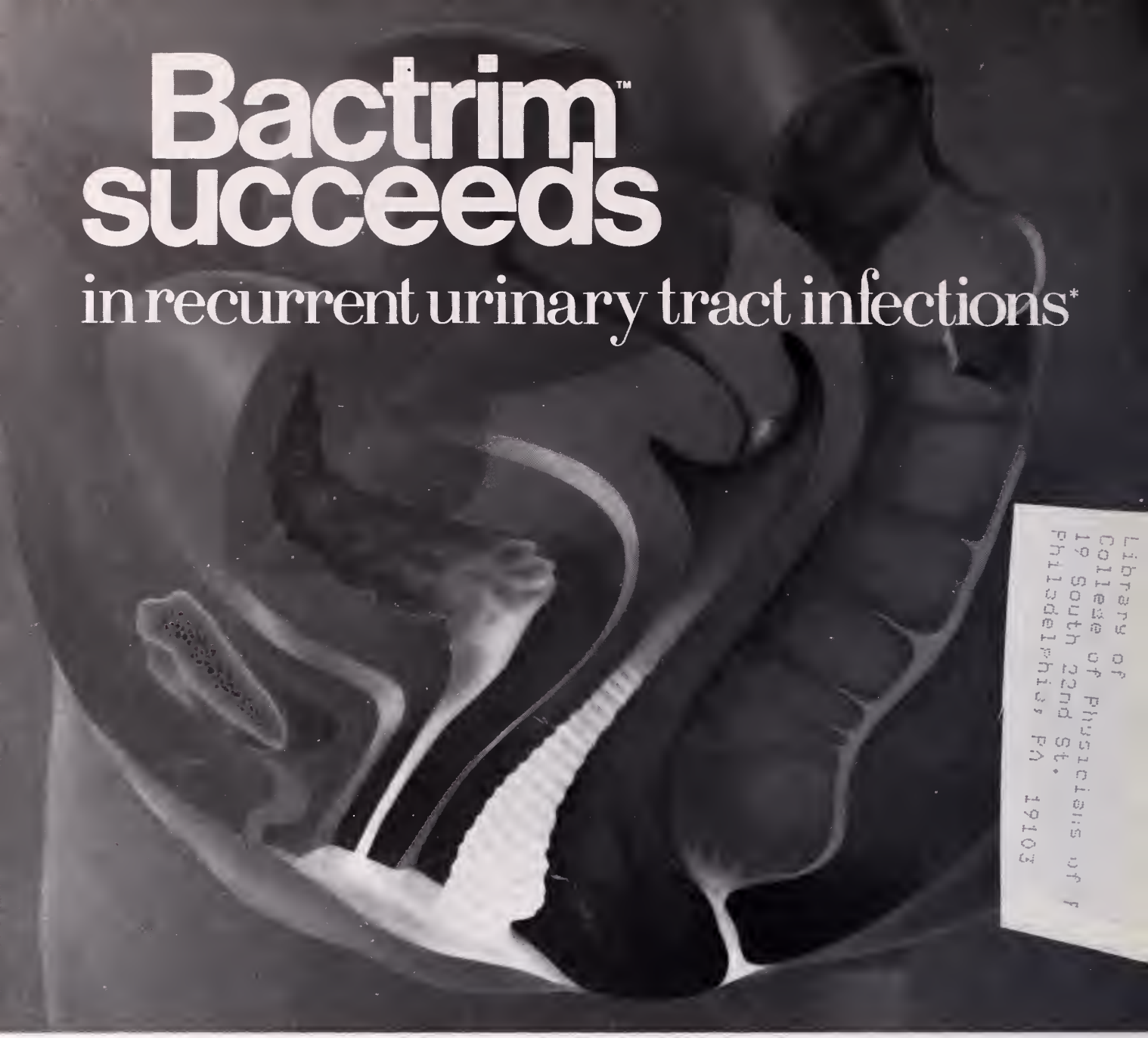
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faster relief of diarrhea than with ampicillin[2]

BACTRIM™ (trimethoprim and sulfamethoxazole/Roche)
Before prescribing, please consult complete product information, a summary of which follows:
Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.
Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.
Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.
ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:
Usual adult dosage. 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 14 days.
PNEUMOCYSTIS CARINII PNEUMONITIS:
Recommended dosage: 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table.
Supplied: *Double Strength (DS) tablets*, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100; Prescription Paks of 20 and 28. *Tablets*, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40. *Pediatric Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); cherry flavored—bottles of 100 ml and 16 oz (1 pint). *Suspension*, containing 40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoonful (5 ml); fruit-licorice flavored—bottles of 16 oz (1 pint).

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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. **2.** Data on file, Medical Department, Hoffmann-La Roche Inc.

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*due to susceptible strains of indicated organisms

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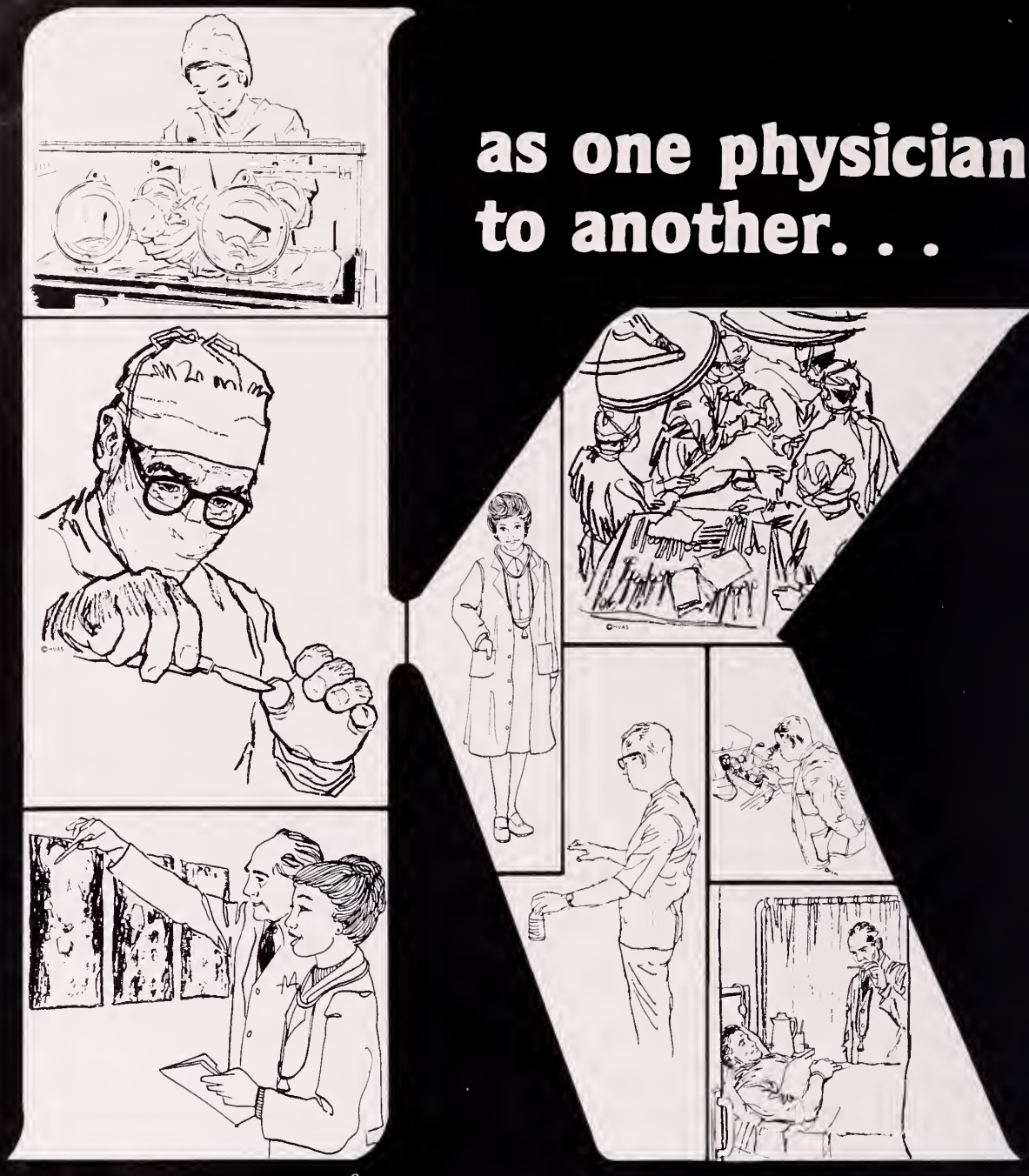
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- Congenital Heart Disease
- Abnormal PAP Smear
- Renal Failure

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The Journal Of The Kentucky Medical Association

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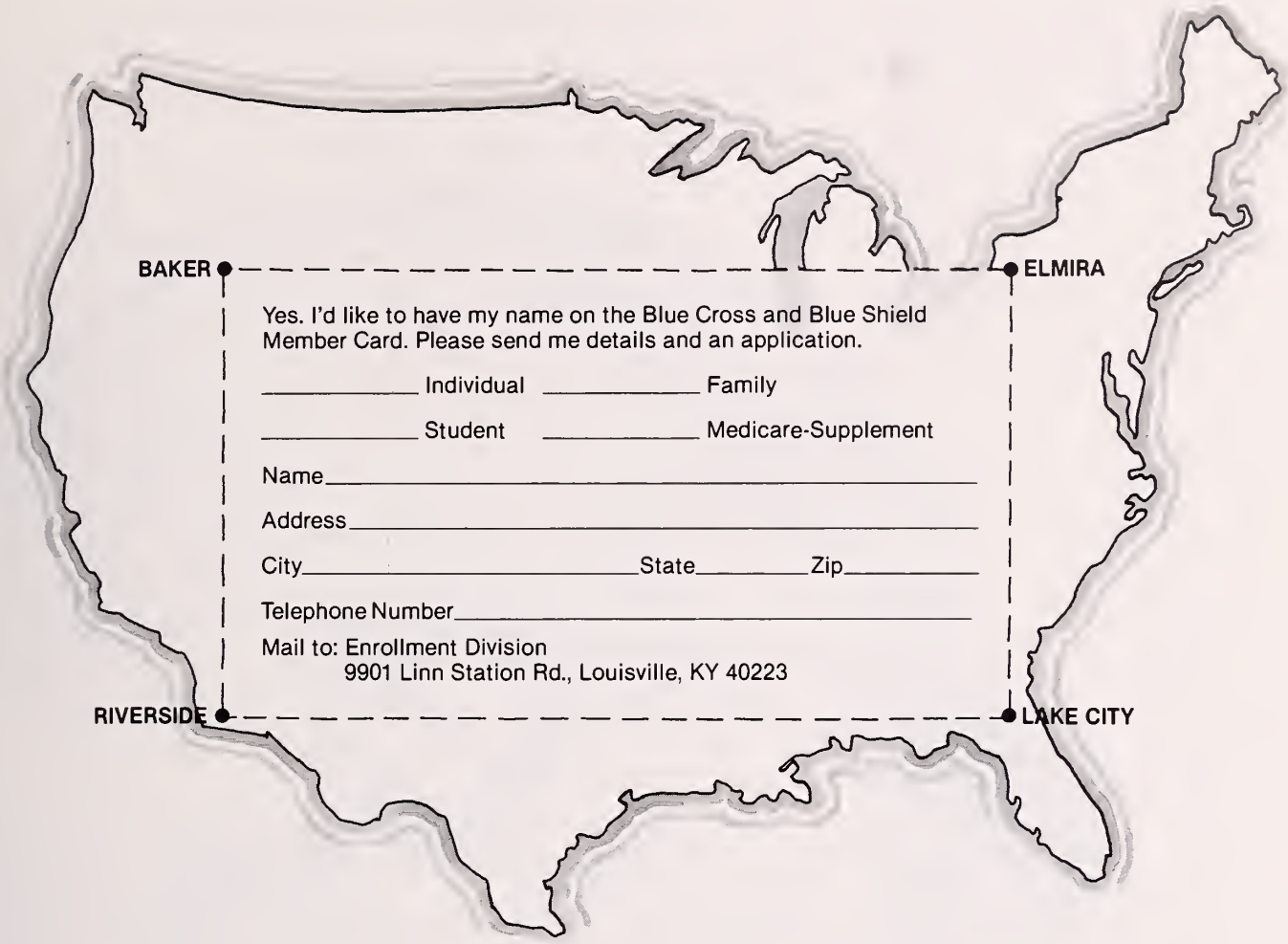
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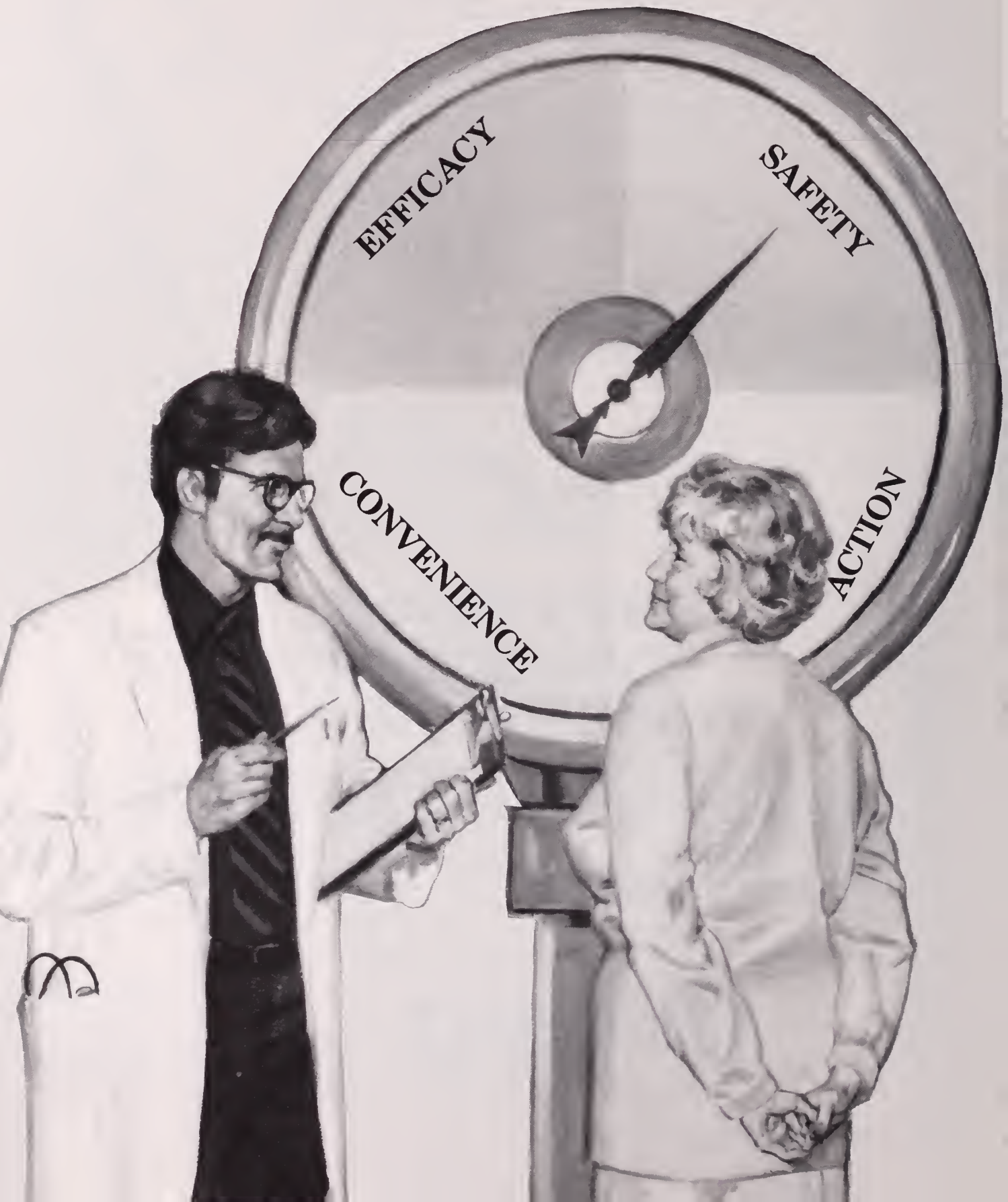
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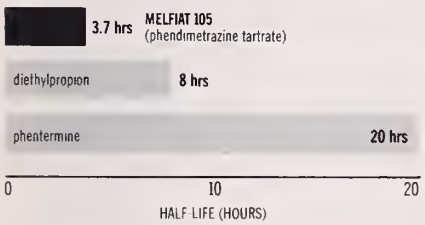


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2. Douglas JG, Munro JF: The role of drugs in the treatment of obesity, *Drugs* 21:362-373, 1981.

MELFIAT® 105 UNICELLES® C III
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PRECAUTION: Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine tartrate and the concomitant dietary regimen. Phendimetrazine tartrate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: Cardiovascular: Palpitation, tachycardia, elevation of blood pressure.
Central Nervous System: Overstimulation, restlessness, dizziness, insomnia, euphoria, dysphoria, tremor, headache; rarely psychotic episodes at recommended doses.
Gastrointestinal: Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances.
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PRESIDENT'S PAGE

As you read this month's issue of the Journal, we bring to a close another chapter in the long history of the KMA. In this final article, I have no intention of dwelling on negative concerns, but rather I want to emphasize the positive things occurring at KMA. Across the board, KMA members are interested in moving toward solutions and accomplishments which best serve our patients and our profession.

During the year we have made a strong effort to feed back information to you, to visit with you, to solicit your advice and deal with your concerns. This has enabled us to "Feel the Pulse" and emphasize those issues of importance which affect us all daily. Many of our programs, committees, and positions come as a direct result of these "One on One" contacts.

During this past year the Board of Trustees, under the able leadership of chairman Dick Hench, has carried out your mandates and protected your interests. You have been served well this year, and the members of the Board of Trustees should be recognized for their personal sacrifice and complimented for their devotion to duty in representing you throughout the Commonwealth. The KMA headquarters, under the direction of Executive Vice President Bob Cox, is a beehive of activity and your staff always stands ready to assist you.

Ann and I have had the pleasant experience of renewing many old friendships and adding new ones this year. Serving as President of the Kentucky Medical Association and representing you on the national and state levels has been a great personal honor and privilege.

The Kentucky Medical Association is strong and stands ready to meet the challenges of the future, while retaining the values of the past. If I were allowed to write a final phrase which would represent a standard established and developed by this association, it would be:

"We always asked two questions when an issue was raised or a decision made, 'Is it fair to the patient and does it serve and enhance the profession?' "

Ballard W. Cassady, M.D.
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The Journal Of The Kentucky Medical Association

September 1982 Volume 80 Number 9

SCIENTIFIC

New Concepts in the Treatment of Congenital Heart Disease

CONSTANTINE MAVROUDIS, M.D., W. ROBIN HOWE, M.D., and LAMAN A. GRAY, JR., M.D.

The treatment of congenital heart disease has changed within the past 15 years. Palliative procedures are used less and less, while corrective procedures are used in younger patients with excellent results. We discuss five types of congenital heart disease whose treatment has changed markedly because of the development of new techniques of cardiopulmonary bypass, myocardial preservation, and the refinement of profound hypothermia and circulatory arrest. Historical aspects and newer operative procedures are discussed with relation to improved survival of the newborn with congenital heart disease.

THE early surgical approach to congenital heart disease was pioneered by Blalock and Taussig[1] with the introduction of the subclavian to pulmonary artery shunt which now bears their names. Figure 1 shows the Blalock-Taussing procedure and other palliative procedures introduced by Potts,[2] Waterston[3] and Glenn[4] which had immense impact on the management of cyanotic congenital heart disease.

With the development of extracorporeal circulation,[5] total intracardiac repair became feasible and corrective surgery was introduced. These procedures, however, were done in older age groups because of the associated high mortality when correction was attempted in infants. Consequently, palliative procedures such as pulmonary artery banding, closed atrial septectomy, and peripheral artery pulmonary shunts were done early in patients' lives and, when necessary, followed by corrective surgery later.

The introduction of profound hypothermia and circulatory arrest, by Barratt-Boyes and others[6] in the early 1970's, and improved techniques for myocardial preservation allowed time for longer operations in younger and younger babies. Thereafter, reports of successful corrective surgery performed in the first three months of life in infants with Tetralogy of Fallot,[6,7] transposition of the great vessels,[8] ventricular septal defect[9] and truncus arteriosus[10] were published in the mid-to late-1970's. As a result, the role of conventional palliative procedures has changed markedly. Survival is now possible with many types of corrective surgery, central shunt-

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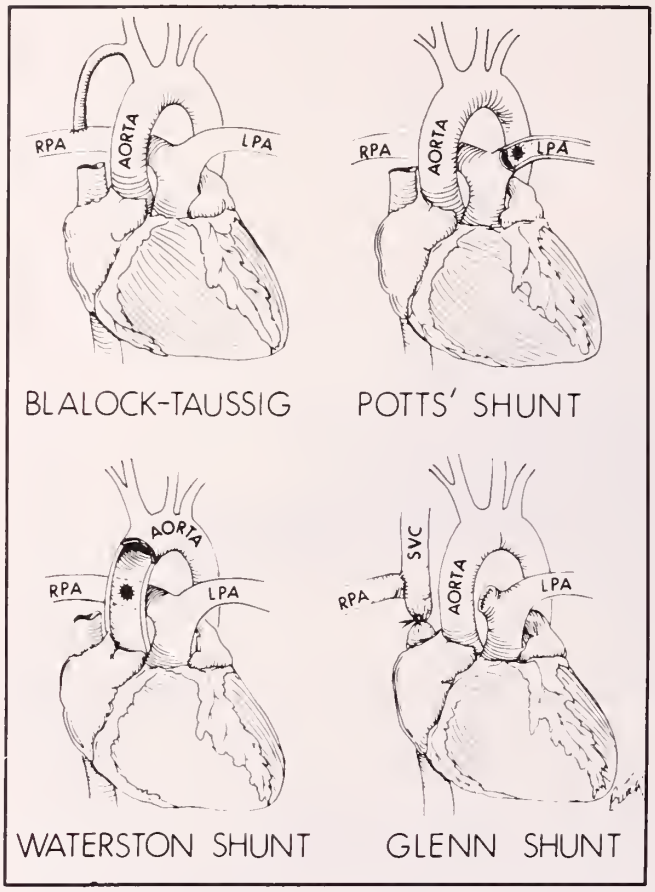


Fig. 1: Diagrams of systemic to pulmonary artery shunts. These operations have pioneered the treatment of cyanotic congenital heart disease.

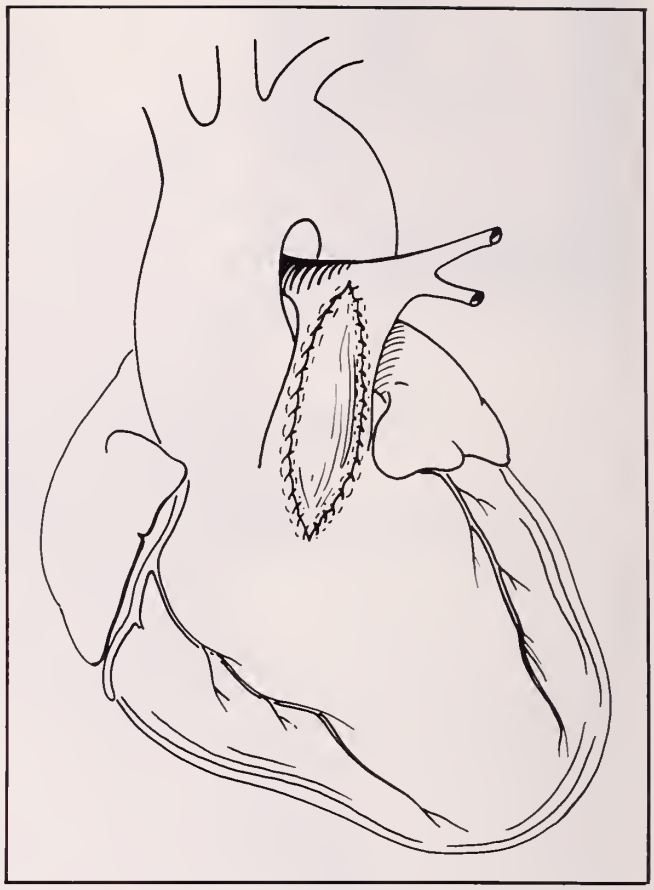


Fig. 2: Diagram of a pulmonary outflow tract patch without closure of the ventricular septal defect in a patient with Tetralogy of Fallot and small pulmonary arteries.

ing, and other unconventional forms of central palliation that result in a more physiologic type of palliation.[11] Such procedures can be accomplished in early infancy with acceptable risk. Consequently, the basic philosophy had changed from palliate now and correct later to correct now and avoid the pitfalls of corrective surgery after palliative surgery later. The magnitude of this change and its effect on both the use and selection of operative procedures in early infancy is the topic of this paper. We chose five patients with congenital heart defects to illustrate the developments over the last 15 years in palliative and corrective surgery. The representative diseases are: ventricular septal defect, Tetralogy of Fallot, truncus arteriosus, transposition of the great arteries and atrioventricular canal.

VENTRICULAR SEPTAL DEFECT

Case Presentation #1: An eight-month-old female presented at three weeks of age with upper respiratory infection and congestive heart failure. At that time, she had a III/VI mid-systolic murmur and an echocardiogram showed a moderately large ventricular septal defect. She was treated with Lanoxin and diurectics and had a cardiac catheterization which showed equal pressures in the right and left ventricle and a pulmonary to systemic flow rate of 3.5 to 1. She subsequently had two more admissions for recurrent left lower lobe pneumonia and right middle lobe collapse. Because of recurrent pulmonary infections and failure to thrive, she presented for evaluation of surgical correction. At physical exam, she was an ill-appearing tachypneic and malnourished five Kg child. At operation, a large ventricular septal defect was closed through a right ventriculotomy with a

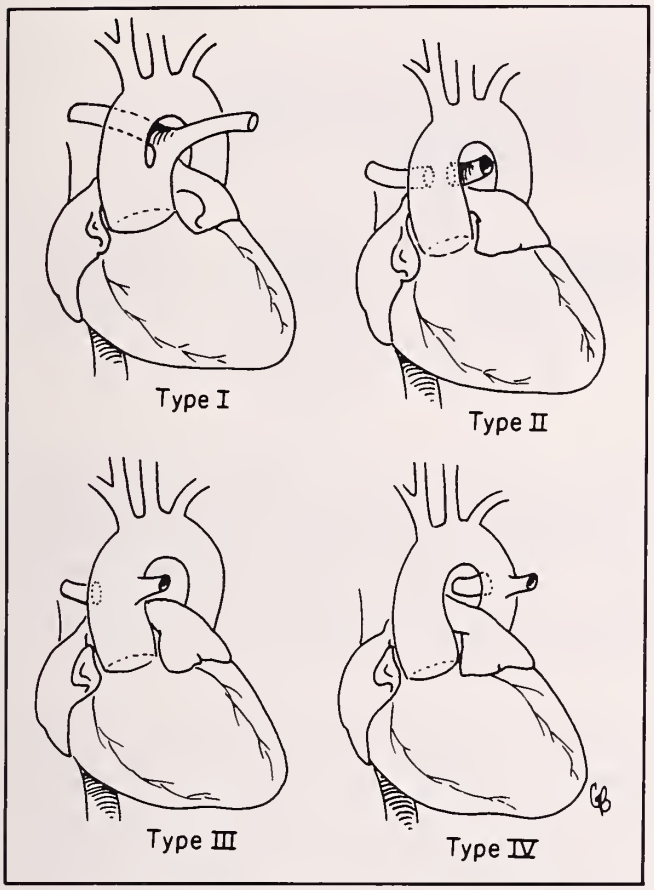


Fig. 3: Types of truncus arteriosus. Classification is dependent on the location of origin of the pulmonary arteries from the common trunk.

dacron patch utilizing running suture technique. She had an uneventful operation and postoperative course and was extubated the next day. Her hospital course was marked by decrease in tachypnea and increase in activities. Lasix and Digoxin administration has since been discontinued and she is now gaining weight without heart failure.

The palliative treatment of ventricular sepatal defect (VSD) was pioneered by Mueller and associates in 1952 with pulmonary artery banding.[12] This had an immense impact on the management of these patients since the pulmonary artery blood flow could be controlled and the development of pulmonary vascular hypertension curtailed. Lillehei in 1955[13] and Kirklin[14] in 1957 pioneered the complete correction of VSD by closure of the defect under cardiopulmonary bypass. These operations, however, were done in older age groups and palliation was still being done in the form of pulmonary artery banding to be followed in later years by debanding and complete correction. With improved techniques of cardiopulmonary bypass, myocardial preservation and better materials, correction could be accomplished in younger age groups. Kirklin[9] in 1961 showed that VSDs could be closed in infants under one year of age with good results.

Table 1. Complications Associated with Pulmonary Artery Banding

Mortality 5-26%
Complications
Initial Operation Ineffective
Complication Proximal to Band Site
Complication at Band Site
Complications Distal to Band Site

The reason for the trend toward correction and not palliation is that there are significant complications and mortality associated with pulmonary artery banding. Table 1 shows that the mortality rate for patients undergoing pulmonary artery banding can be as high as 26%, depending upon the age and complexity of the defect.[15] The complications are many and include the ineffective initial operation that can result in cyanosis if the band is too tight or in recurrent congestive heart failure if the band is too loose. Other complications such as pulmonary artery hemorrhage, severe right ventricular hypertrophy, pulmonary valve thickening, and abnormalities in perfusion and ventilation of the lungs have been reported. Arciniegas[16] compared symptomatic infants who had either primary closure of their VSD or pulmonary artery banding as a palliative procedure. The mortality rate for closure of the VSD was 7.6%, with only one patient developing a recurrent VSD (2%). The initial mortality rate for pulmonary artery banding was 17.8%. At the time of correction (debanding and VSD closure), three patients (8%) had severe elevation of pulmonary vascular resistance despite the pulmonary artery band. Moreover, the mortality rate at the second operation to close the VSD was 9.3%. Clearly, primary repair is the better approach to these patients since the problems of pulmonary artery banding and an obligatory second operation at a later date is avoided.

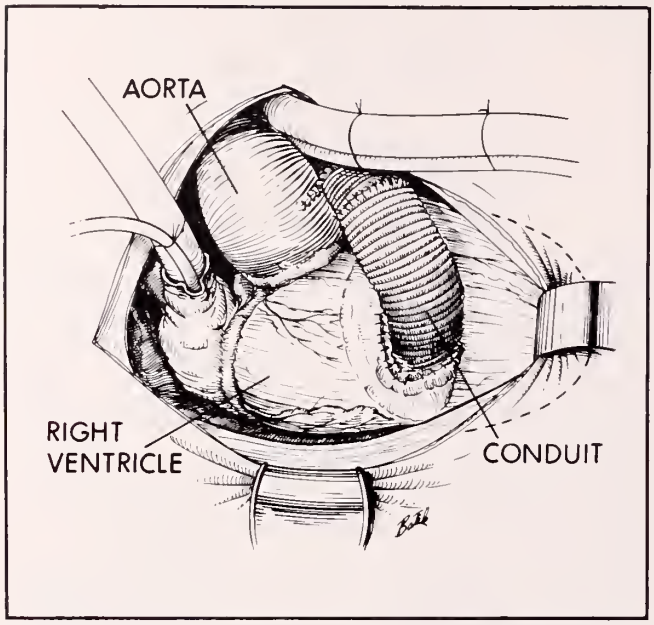


Fig. 4: Diagram of complete repair of truncus arteriosus. The ventricular septal defect has been closed and a dacron conduit with a porcine valve has been employed to create the new pulmonary artery.

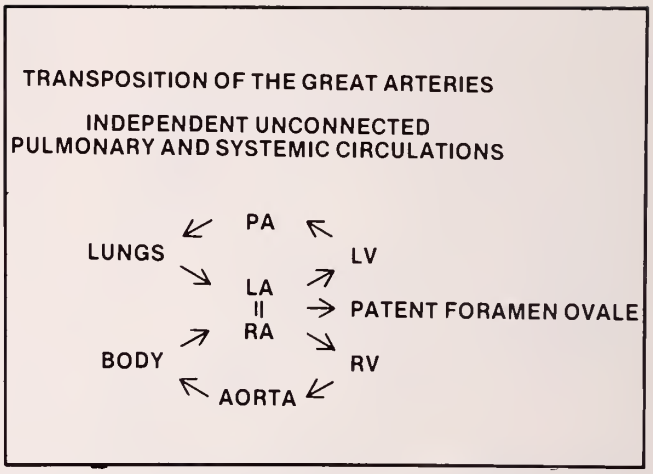


Fig. 5: Diagramatic representation of the two distinct circulations in transposition of the great arteries. Note that the only mixing of the circulations occurs through the patent foramen ovale. The Rashkind balloon septostomy (tearing and enlarging the foramen ovale by passing an inflated balloon from the left to the right atrium) can increase the amount of atrial mixing and allows delay of definitive repair until child is larger.

TETRALOGY OF FALLOT

Case Presentation #2: A two-month-old cyanotic three Kg child presented with severe Tetralogy of Fallot. She was admitted to the hospital because of severe cyanotic spells and had been placed on Inderal. She did not improve and cardiac catheterization showed a large ventricular septal defect with severe subpulmonic and pulmonic stenosis. Because of severe cyanotic spells the patient was taken to the operating room, where, through a mediastinotomy and cardiopulmonary bypass, a transanular incision was made from the right ventricle to the pulmonary artery. A pericardial patch was then placed to augment the pulmonary outflow tract patch and increase the flow to the pulmonary artery. The ventricular septal defect was not closed at this time. Postoperatively, the patient did well and was extubated on the first postoperative day. During her convalescense she remained pink and did not have any more cyanotic spells. She was discharged on the eighth postoperative day to return in eight months time to have the ventricular septal defect closed. The complete repair was not undertaken at the time of the first operation because the pulmonary arteries were only one-third the size of the aorta. Full repair may have resulted in right ventricular failure due to the small pulmonary arteries. This method allows the pulmonary arteries to grow with time and accept the greater cardiac output that will be necessary when the ventricular septal defect is closed.

The palliative treatment of Tetralogy of Fallot was pioneered in 1945 by Blalock and Taussig.[1] In 1955, Lillehei[17] performed the first open repair of Tetralogy of Fallot under cardiopulmonary bypass. Since that time, Barratt-Boyes[18] and others have been accomplishing repairs in infants with Tetralogy of Fallot under one year of age. There is, however, a controversy in the literature about whether complete repair should be made during infancy or palliation done to be followed by complete repair later.[19-23] Table 2 shows the advantages and disadvantages of both correction and palliation performed in infants. Many factors enter into the correction in infants with Tetralogy of Fallot, including the size of the pulmonary arteries, the amount of pulmonary regurgitation if any, and the overall condition of the patient. Our goal is to correct patients with severe Tetralogy of Fallot whenever possible when operation is necessary. If the pulmonary arteries are too small, we prefer to do a pulmonary outflow tract patch to relieve the pulmonic stenosis and, later close the VSD at a

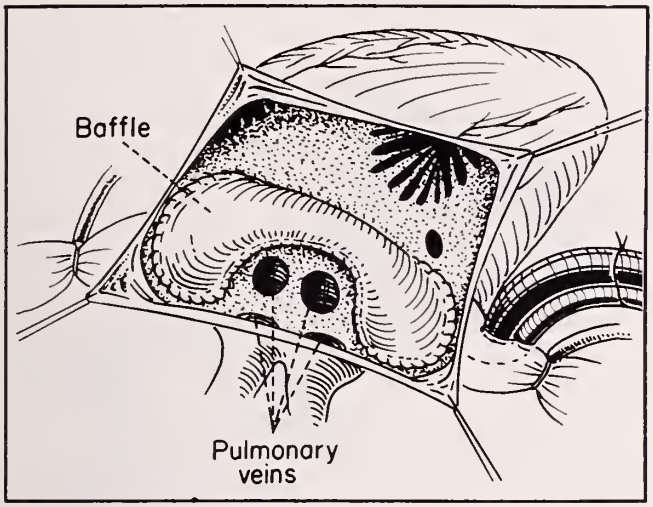


Fig. 6: Pericardial baffle directing blood from superior and inferior vena cavae to the left ventricle. The pulmonary veins can now drain into the right ventricle.

separate operation.[7] This type of palliation avoids the kinking due to peripheral pulmonary to systemic shunts and also ensures central flow and symmetrical growth of the pulmonary arteries. Figure 2 shows the placement of a pulmonary artery outflow tract patch in a patient with small pulmonary arteries and Tetralogy of Fallot.

The long-term results of patients with corrected Tetralogy of Fallot remains speculative. The amount of pulmonic insufficiency due to transanular incisions and patch placement may have a significant effect on the funciton of the right ventricle later in life. Some of these patients may require eventual pulmonic valve insertion for right ventricular deterioration. The majority of patients, however, have done quite well[24] and will probably need no further surgery throughout their lifetime.

TRUNCUS ARTERIOSUS

Case Presentation #3: A two-year-old female was diagnosed to have truncus arteriosus Type I at three months of age. She was lost to followup and presented again at two years of age for increasing shortness of breath. Another catheterization showed equal pressures in the right and left ventricle with a common truncus giving rise to the aorta and to the main pulmonary artery. At physical exam, she appeared to be a thin, ill-appearing two-year-old child in moderate respiratory distress. At operation, a complete repair of the truncus arteriosus Type I was undertaken. Through a right ventriculotomy the ventricular septal defect closed. The pulmonary artery was dissected and severed from the main trunk after which the main trunk was resutured and became the aorta. A number 14 Hancock valve conduit was then sewn to the distal pulmonary artery and to the right ventricle to establish right ventricular to pulmonary artery continuity. Initially, the patient did quite well

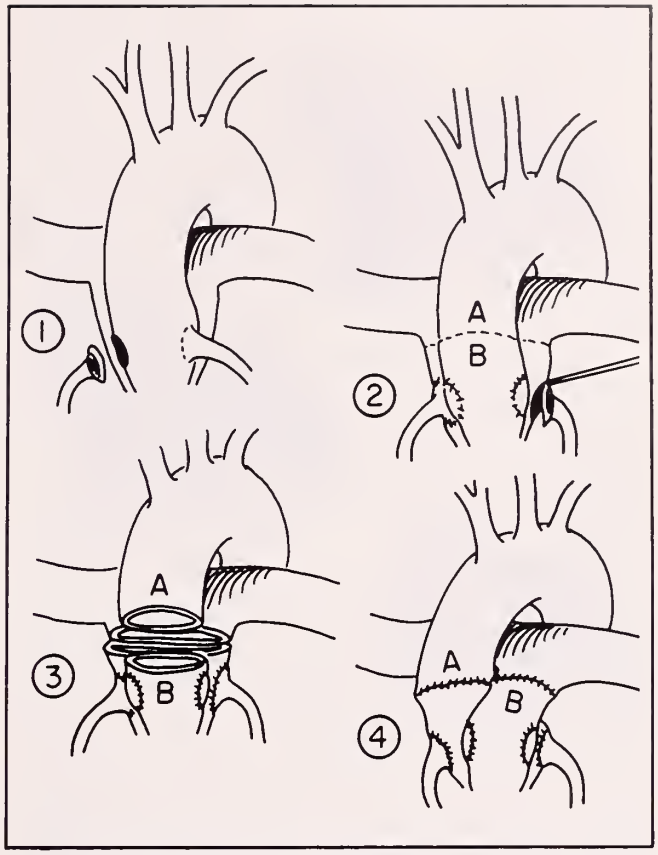


Fig. 7: Diagram showing the arterial switch operation for transposition of the great arteries. The great arteries are transected and anastomosed to the new corresponding artery. The coronary arteries are cut away from the old aorta and anastomosed to the newly created aorta.

Table 2. Disadvantages of Palliation and Correction of Tetralogy of Fallot in Infancy

Disadvantages of Palliation
Pulmonary Artery Strictures
Lack of Symmetrical Pulmonary Artery Growth
Unilateral Blood Flow Due to "Kinking"
Obligatory Second Operation
Disadvantages of Correction
Cardiopulmonary Bypass in the Infant
Pulmonary Arteries May Be Too Small

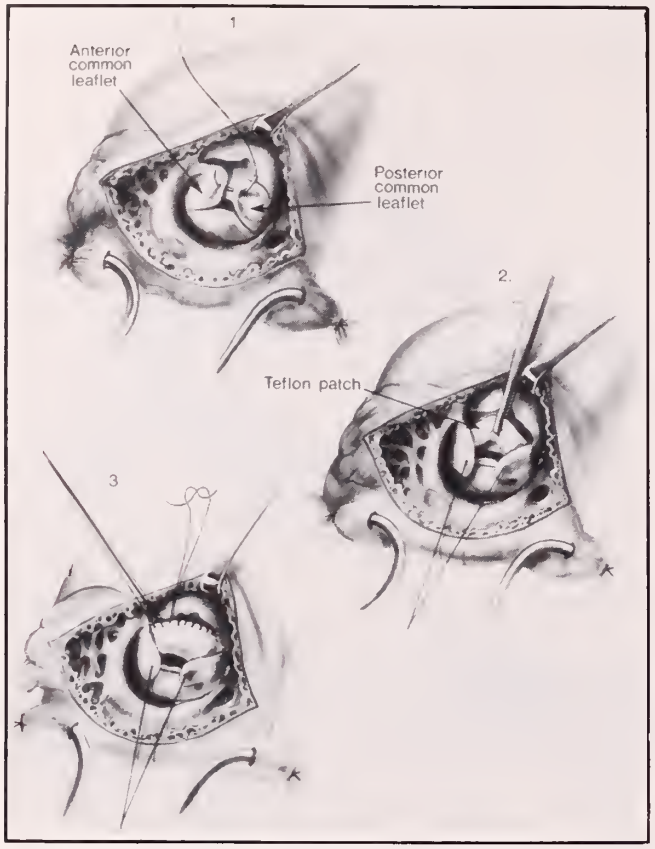


Fig. 8: Drawings show the method of complete repair without incision of the common leaflets. This is a right atrial view of the anterior and posterior common leaflets. The VSD patch is being placed underneath the common leaflets and the sutures are brought through the common leaflets thereby avoiding elective splitting of the leaflets.

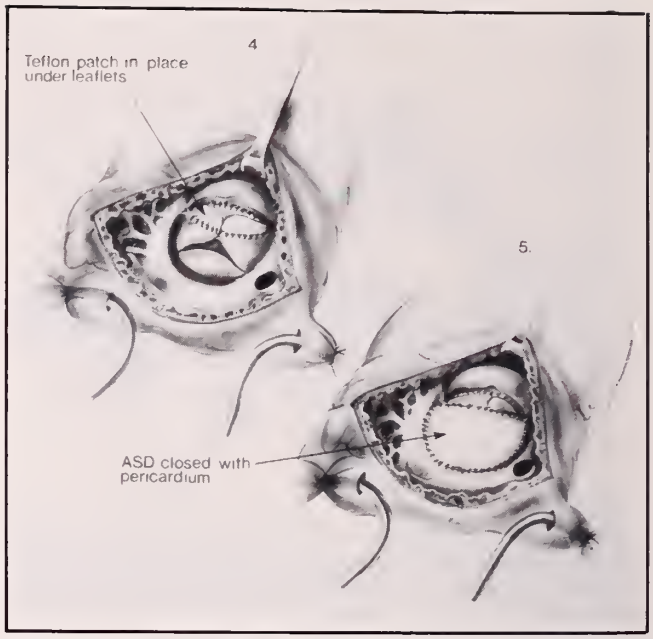


Fig. 9: Drawings show right atrial view of interventricular and intraatrial septation with teflon and pericardium.

and was extubated on the 2nd postoperative day. On postoperative day 12, however, she developed persistent fevers and required antibiotic therapy for presumed bacterial endocarditis. She had a full six-week treatment of intravenous antibiotics which resulted in intractable diarrhea which prevented her from taking a full caloric diet. She was then placed on hyperalimentation and eventually was started on a regular diet. During this time, however, she developed a pulmonic insufficiency murmur and was recatheterized. Recatheterization showed a small residual ventricular septal defect and massive pulmonary insufficiency. It was presumed that the pulmonic valve was injured due to bacterial endocarditis and a replacement would have to be undertaken.

Accordingly, she was brought back to the operating room where a new graft from the right ventricle to the pulmonary artery was placed and the residual ventricular septal defect was closed. Postoperatively, she did well and was extubated the following day and continued to have an uncomplicated postoperative course. She is doing quite well now with minimal medications and increasing activity.

Perhaps the most challenging patients in infancy are those with truncus arteriosus lesions. Without therapy, mortality rates are upwards of 90% in the first year of life.[25] Palliative procedures have been uniformly unsuccessful due to ineffective palliation and high mortality. In order to successfully correct this anomaly, a valved conduit had to be developed to reconstruct the pulmonary artery. Figure 3 shows the types of truncus arteriosus. Rastelli[26] in 1967 developed a valved conduit to establish right ventricular to pulmonary artery continuity. Since that time refinements of valved conduits, innovative intraoperative techniques and careful postoperative management have accounted for improved survival in patients with truncus arteriosus.

Figure 4 shows a completed repair of Type I truncus arteriosus. The VSD was closed through a right ventriculotomy, the pulmonary artery was cut away from the truncus, the aorta closed and a valved conduit inserted between the distal

pulmonary artery and the proximal right ventricle to establish right ventricular to pulmonary artery continuity. The fate of the conduits in small patients with corrected truncus arteriosus has been the subject of much attention.[27,28] Since these conduits are very small, and since the patients are expected to grow, valve replacement ultimately becomes necessary. The author and others[27] have reported the results of 134 patients who underwent primary repair of right ventricular to pulmonary artery discontinuity. Of these patients, 16 required reoperation for stenosis of the valved conduits. The stenosis was usually due to pseudointimal hyperplasia of the valved conduit and, in some cases, to pulmonic stenosis in calcified valves. All 16 patients underwent replacement of their valved conduits without a death and significant increase in size of the conduits was achieved at the second operation. Consequently, replacement can be accomplished with a low operative risk. Only time will tell now what the frequency of conduit replacement and what the ultimate survival will be.

TRANSPOSITION OF THE GREAT ARTERIES

Case Presentation #4: A four-month-old male, at birth, was found to be cyanotic. He underwent cardiac catheterization and was found to have transposition of the great vessels with a small ventricular septal defect and pulmonic stenosis. At the same time, he had a Rashkind balloon septostomy to increase his atrial mixing which increased his peripheral oxygen saturation. He was followed for four months and presented to the hospital for complete repair. At surgery, this six Kg cyanotic child was placed on cardiopulmonary bypass after he had been surface cooled to 28 degrees. He was then further cooled to 15 degrees whereupon cardiopulmonary bypass was ceased. Under profound hypothermia and circulatory arrest, he underwent a complete repair utilizing a Senning repair. The pulmonary artery stenosis was also repaired at this time. The total circulatory arrest time was 35 minutes and the patient was then placed back on cardiopulmonary bypass and rewarmed. He became pink and had normal oxygen saturations. He developed, however, on the sixth postoperative day, fluid in the right chest which turned out to be a small chylothorax and had to be drained with a chest tube. This, however, did not cause him any difficulty and resolved with drainage. He was discharged on the 14th postoperative day after a Senning procedure and resection of the pulmonic stenosis doing quite well.

Transposition of the great arteries is the most common cyanotic congenital lesion presenting in infancy. Essentially, the aorta is connected to the right ventricle and the pulmonary artery is connected to the left ventricle, thereby producing two independent, unconnected circulations. Figure 5 shows that the circulation involving the aorta and the right ventricle never comes into contact with the circulation involving the pulmonary artery, lungs and left ventricle. It is only through a patent foramen ovale that the patient can get enough atrial mixing to live. The first attempts at palliation of this complex disease was done by Blalock and Hanlon[29] in 1948, when they resected a portion of the interatrial septum to increase atrial mixing. In 1959, Senning[30] presented his interatrial repair, using cardiopulmonary bypass to correct the anomaly by redirecting flow at the atrial level. In 1964, Mustard [31] used a pericardial baffle to accomplish the same physiologic result as in the Senning operation. Both of these operations are used today. Recent reports,[32,33] however, seem to favor the Senning operation since the atrial flaps tend to grow with the patient and cause less obstruction than the pericardial baffle that is pictured in Figure 6. Since the pericardial baffle does not grow with time, superior vena caval obstruction and, possibly, pulmonary venous obstruction may develop. Consequently, the current trend is to use the Senning operation when the atrium is large enough to make the appropriate flaps. If the atrium is small, then the Mustard operation can be used.

Recently, there has been interest in the Jatene operation,[34] which is a more physiologic type of correction (Figure 7). The purpose of this operation is to switch the great vessels and reimplant the coronary arteries to the new aorta, thereby resulting in a complete physiologic repair with the left ventricle connected to the aorta and the coronary arteries and the right ventricle connected to the pulmonary arteries. While these new gains are exceedingly inter-

esting, the technical aspect of this operation is considerable and long-term results need to be evaluated before it is embraced. Thus, the standard operation for simple transposition continues to be the interatrial baffle repair. The controversy about which operation is better remains unresolved.

The long-term followup of patients with atrial baffle repair also poses questions. There have been reports of a sudden death syndrome associated with corrected patients long after their repairs. Presumably, this is related to atrial arrhythmias which occur often in these patients. Also, there is a question relating to the durability of the right ventricle to act as a systemic ventricle and the tricuspid valve to act as a systemic atrioventricular valve. So far, patients with surgically corrected transposition have done quite well and it is the rare case that requires tricuspid valve replacement for insufficiency.

ATRIOVENTRICULAR CANAL

Case Presentation #5: A 14-month-old female presented with Down's Syndrome and complete atrioventricular canal. She was known to have atrioventricular canal from birth and has been followed on medical therapy. She was admitted to the emergency room with gasping respirations and quickly had a respiratory arrest. The child was resuscitated and brought to the intensive care unit. She was rehydrated and treated with intravenous fluids and eventually had a cardiac catheterization which showed complete atrioventricular canal and equal pressures in the right and left ventricle. After the child was eventually weaned from the ventilator, she remained tachypneic. Because of severe congestive heart failure and failure to thrive, this 4.5 Kg 14-month-old child was taken to surgery. She was found to have a Type A, complete atrioventricular canal with a large ventricular septal defect underneath the common anterior leaflets. She underwent complete repair with closure of the ventricular septal defect with dacron, reapproximation of the mitral and tricuspid valves and a separate closure of the atrial septal defect with pericardium to prevent hemolytic anemia in the post-operative period. She had an uneventful operation and on the second postoperative day was extubated and did quite well thereafter. She was discharged on the 15th postoperative day on mild doses of diuretics to be followed clinically.

Successful correction of complete atrioventricular canal became possible after the anatomic studies by Rastelli[35,36] and others, in which they more clearly characterized the division of the common leaflets into their tricuspid and mitral components. In this complex anomaly there is deficiency of the posterior base of the heart, malalignment between the atrial and ventricular septa and malformation of the mitral and tricuspid valves. Essentially, every chamber communicates with the other during the phases of diastole and systole.

Early successful repairs were done in older age groups with good results.[37] The natural history of complete atrioventricular canal, however, reveals that a great number of patients develop irreversible increased pulmonary vascular resistance in the first year of life that is attended by high mortality.[38] Consequently, total correction of this defect in infants became more and more common.[39,40]

The earlier repair, described by McGoon,[39] emphasized the need to incise the common leaflets into their mitral and tricuspid components and reattach them with sutures to the dacron patch. This suture technique by necessity sacrifices 1-2 mm of valve tissue from the mitral and tricuspid components simply to reattach the severed valves. While this may not be significant in the older age groups, it becomes more and more critical in infants. Persuant to this problem, a new technique has been developed to avoid incision of the common leaflets and thus avoid the sacrifice of valve tissue in the infant[40] (Figures 8,9). This technique emphasizes the preservation of valve tissue and minimizes the chance of patch disruption. Moreover, the use of pericardium and not dacron has helped to avoid the development of hemolytic anemia due to turbulence at the site of the dacron patch.

These advances have helped to improve the results of complete repair of atrioventricular canal. The long-term results still remain in question since the fate of the atrioventricular valves and their function remain untested.

Conclusion

There have been numerous advances in the treatment of congenital heart disease over the last 15 years. Early correction over palliation has been stressed and has been attended by excellent results. Present technology of valved conduits, improved cardiopulmonary bypass and better myocardial protection have accounted for the improved results. In the future, better prosthetic valves may account for fewer reoperations, and for patients with complex uncorrectable anatomy, heart and lung transplantation may become more feasible.

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Managing the Abnormal PAP Smear

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When dysplasia or neoplasia is encountered on a pap smear taken from the uterine cervix, colposcopy should be performed to determine the severity of the epithelial lesion, allow for a directed biopsy of the most abnormal area and identify the geographic boundaries of the abnormality. Once invasive carcinoma has been excluded, outpatient treatment can be offered with either cryosurgery or laser surgery. This is especially important in young patients who anticipate future pregnancies.

THIRTY years ago, invasive carcinoma of the uterine cervix was most often diagnosed in the advanced clinical stages, occurred at an incidence of 28.4 per 100,000 women and had a mortality rate of 11.4 per 100,000 women.[1,2] Today, invasive cervix cancer is most frequently diagnosed while in the early clinical stages, has an incidence of 7.6 per 100,000 women and a mortality rate of 3.8 per 100,000 women.[1,2] This dramatic reduction in both the incidence and mortality rates of cervix cancer is mostly attributable to the cytologic recognition of cervical neoplasia as presented in 1943 by Doctor George Papanicolaou.[1,2,3] His technique for the collection of the cytologic specimen and the classification of the cellular abnormalities has enabled physicians to detect asymptomatic carcinoma, and more importantly, preinvasive conditions of the uterine cervix.

In direct response to both the declining incidence and mortality rates, physicians have strongly encouraged all women to have annual pap smear screening. Recently, however, national organizations considering the economic and social demands of large screening programs have begun to challenge the need for an annual pap test in all women. Current guidelines now emphasize the importance of frequent cytologic screening only in women at high risk for neoplastic disease and less frequent screening in women at low risk.[3] The high risk population includes those women who began sexual activity before the age of 18 and who have had multiple sexual partners. Those women with a history of an abnormal pap smear, Herpes genitalis or intrauterine exposure to diethylstilbesterol might also be included in this high risk group.[3,4] Conversely, celibate women and women who have had several normal pap smears and do not have any of the above mentioned risk factors are examples of low risk individuals. The frequency of pap testing in the low risk group might well be reduced to every two years, although an annual gynecologic examination is still recommended.[3]

The cytologic screening of large populations of women for cervix cancer has been associated with a reduction in the incidence of invasive cervix cancer and cancer related mortality. This improvement has been demonstrated by Dr. William Christopherson, who instituted a pap smear screening program in Jefferson County, Kentucky in 1956.[1] Since then, he has observed a 38% decrease in the incidence of invasive cervix cancer and a six-fold increase in the diagnosis of carcinoma in situ. Similar findings are reported by Boyes in those Canadian provinces where intensive pap smear screening was implemented.[2] In Scotland, McGregor identified the incidence of invasive cervix cancer as 55 per 100,000 women in the screened population as opposed to 310 per 100,000 women in the unscreened population.[3]

Despite the success of screening programs, there is an inherent false negative rate associated with pap smears. At Johns Hopkins University, Silbar and Woodruff compared pap smears obtained simultaneously with cervical biopsies and conizations that were being performed in

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women with a previous abnormal cervical cytology.[5] 15.7% of the newly acquired cytologies were falsely negative. The factors which often contribute to a false negative pap smear are improperly collecting the specimen, improper fixation of the slide and imprecise interpretation.[6,7,8]

A consideration of the anatomy of the uterine cervix will facilitate an understanding of cervical neoplasia. The uterine cervix is divided into three zones: the exocervix, which is lined by mature squamous epithelium, the endocervix, which is lined by mature columnar epithelium and the transformation zone. In the transformation zone, metaplasia occurs and converts columnar epithelium into squamous. Under the influence of unknown factors, metaplasia becomes disorderly and results in the premalignant condition, dysplasia, which in current terminology, is called cervical intraepithelial neoplasia or CIN.[8,9] CIN I is synonymous with mild dysplasia and represents a cellular and histologic abnormality confined to the inner ⅓ of the epithelium. CIN II, or moderate dysplasia, represents progression of this abnormality to the middle ⅓ of the epithelium. CIN III includes both severe dysplasia and carcinoma in situ and represents full thickness epithelial change. With rare exception, cervix cancer arises as an intraepithelial process in the transformation zone.[9]

A pap smear should be collected from the transformation zone since the neoplastic process begins in this location. A satisfactory smear should include both a light scraping of the uterine exocervix to collect the exfoliated and loosely held cells in addition to either an aspiration or a cotton applicator swab of the endocervical canal. Using this technique, the false negative rate can be reduced to 5-10%.[8] Gouging of the cervix by roughly handling the spatula produces too much tissue for interpretation and often causes bleeding which complicates further evaluation. Too thick a smear, air drying or inappropriate fixation of the slide can produce cytologic changes that appear atypical to the cytologist. Additionally, lubricating jellies, acetic acid and too much water also produce atypical cytologic changes. A pap smear which is taken from the pool of secretions in the posterior vaginal fornix is unsatisfactory because the desquamated cells which gather in this location undergo degeneration, become mixed with bacteria and inflammatory debris and are so diluted that dysplasia may not be recognized.

The current understanding of the pathogenesis of cervix cancer is that dysplasia may develop in the transformation zone which is undergoing metaplasia and gradually progress to carcinoma in situ and subsequently to invasive cancer.[4,8,9] In any particular patient, however, dysplasia may progress at a faster rate or need not progress at all. In a prospective study of 206 patients, Hall observed that 62% of mild dysplasia cases experienced spontaneous regression while only 13% progressed to a more serious lesion.[10] However, when severe dysplasia was initially present, 33% of patients had progression while only 19% regressed. When the intraepithelial process has advanced to a carcinoma in situ, the frequency of progression increases.[3] During a 21-year observation period, Kottmeir observed that 25 of 34 patients with untreated carcinoma in situ developed invasive cancer and three of these cancers developed within two years.[3] Consequently, the major difficulty that a clinician encounters in attempting to outline a management program for a patient with an abnormal pap smear is the inability to predict which patient will progress relentlessly to invasive cancer if untreated and the time interval over which this transition will occur.

The initial step in the management of an abnormal pap smear should be to review the patient's history and physical findings. The inflammation and repair which is often associated with vaginal bacterial infection, trichomonas, Herpes and Papova viruses and chlamydia may be responsible for an abnormal cytology.[3,4,7,8,9] The history of hormone use, senile vaginal atrophy or previous radiation therapy is also significant. More commonly, however, an abnormal pap smear is obtained from an asymptomatic patient with an unremarkable gynecologic examination. Under these circumstances, the abnormal smear usually reflects either an intraepithelial or an invasive neoplasm of the uterine cervix. Other neoplasms including those arising in the vagina, endometrium or ovary may also be encountered, but are much less frequent.[8] Consequently, it is important to provide the cytologist with the pertinent clinical history

and for the cytologist to provide a descriptive interpretation of his findings so that a satisfactory clinical correlation can be made.

A class I pap smear connotes normalcy. A class II pap smear usually represents inflammation and a benign reparative process for which a patient may require local or systemic therapy. The pap smear might be repeated after resolution of the infection since dysplastic cells might have been obscured by the heavy inflammatory background. A pap smear classified as III, IV or V connotes cervical intraepithelial neoplasia or invasive carcinoma and should be further evaluated. Colposcopy is the preferred method of evalution unless there is a visible exophytic lesion or ulcer on the cervix which can be biopsied without magnification. Although it has been customary to repeat a pap smear to verify the dysplasia before initiating further evaluation, colposcopy should not be deferred for even if a class I pap smear is obtained on the repeat sample, the initial abnormality still needs to be explained. The inherent false negative rate of the pap test cannot be underestimated and may allow for a false sense-of-security in this situation.

Colposcopy is a technique in which the cervix is viewed with magnification and the epithelial and vascular patterns examined to identify the origin of the abnormal cells.[4,7,8,11,12,13,14] Through the colposcope, the squamous epithelium of the exocervix can be distinguished from the columnar epithelium of the endocervix. The transformation zone is located between these boundaries and inspected and must be seen entirely. A characteristic pattern of dysplasia is a whitened epithelium with mosaicism or punctation, while irregular vessels signify carcinoma. The most abnormal area can be precisely delineated and biopsied to allow the most accurate assessment of the cervix.

Colposcopy is the cornerstone for the outpatient conservative management of a woman with an abnormal pap smear.[4,7,11-17] The purpose of colposcopy is to exclude invasive cancer by visually determining the severity of the lesion, directing a biopsy from the most severe areas for confirmation, and identifying the geographic boundaries of the lesion. The colposcopist then correlates his impression of the lesion with the cytology and histology. When a high degree of correlation exists, invasive cancer can be excluded.[4,12,13,15] An endocervical biopsy may also be obtained to exclude an unrecognized neoplasm in this region.[18]

A current report from Duke University comments that the median age for patients with carcinoma in situ of the uterine cervix has decreased from 40 to 28 years and that cervical dysplasia occurs frequently in teenage patients.[4] In a recent review of patients with cervical intraepithelial neoplasia at the University of Louisville, 15% of 257 patients were less than 20 years of age and 50% were less than 25.[14] These young patients were just as likely to CIN III as were the older patients.

Since many patients with abnormal pap smears are young, some have not completed their family and, consequently, should be treated with a procedure that will maintain the anatomic integrity of the cervix and produce a low risk of interfering with future reproduction as well as achieving both high efficacy and low morbidity. The options for conservative management include observation only,[4,8] electrocautery,[4,8] cryosurgery,[4,8] or laser surgery.[15,17] Conservative management, however, is only possible once invasive carcioma has been excluded. Otherwise, the patient should be hospitalized for conization of the cervix.[4,7,8,17] At the University of Louisville, over 80% of patients with abnormal pap smears can be successfully managed without conization including almost 100% of patients who are pregnant at the time that the abnormal pap smear is obtained.[14]

Observation only is elected in the management of those patients with a limited area of minimal dysplasia.[8] Occasionally, the colposcopically directed biopsy can remove the entire lesion so that treatment other than observation is unwarranted. It should be cautioned that when observation is elected as a course of management, the patient must be highly reliable for follow-up examination.

While electrocautery was employed for many years to manage the abnormal cervix, it has generally been abandoned. This procedure is painful and offers no particular advantage over other techniques. More importantly, the depth of tissue injury is uncertain.[3,4,8]

Cryosurgery has been used extensively at the University of Louisville and other colposcopy clinics to treat cervical intraepithelial neoplasia. The rapid freezing of tissue with carbon dioxide or nitrous oxide to at least a minus 65 degrees centigrade results in intracellular crystallization and cellular disruption.[4,8] Freezing uniformly occurs to a depth of 4.5 mm which encompasses approximately 98% of the epithelium.[20] This freezing process is painless. An occasional patient may experience uterine cramping or a vasovagal response. The major side-effect following cryosurgery is a profuse vaginal discharge for 10-14 days.

In a recent report from one experienced colposcopist, only 19 treatment failures occurred in 2800 patients treated with cryosurgery for cervical intraepithelial neoplasia and there were no invasive cancers in the recurrence group.[11] Other clinical investigators report a 4-16% recurrence rate.[3,4,7,11,14,16] Recurrences were frequently identified within four to six months of the treatment session and, if the pretreatment evaluation had been thorough, invasive cancer had not been identified.

The carbon dioxide laser has been employed to manage patients with cervical intraepithelial disease.[11,15,17,25] The laser achieves tissue destruction by vaporization. This procedure is performed with colposcopy to increase the accuracy of the treatment. The laser is more precise than cryosurgery, but the failure rates are similar, 10-15%. Bleeding is an occasional problem with laser treatment as is pain if extensive tissue destruction is necessary.[24]

When invasive carcinoma cannot be excluded by colposcpy, cervical conization should be performed. Conization is a surgical procedure performed under anesthesia. The technique involves excising a central core of tissue from the cervix.[21,22] Postoperative bleeding may occur in up to 9.9% of patients and transfusions have been required in 2%. Pelvic infection and cervical stenosis are seen. Conization may also be a threat to future childbearing and some authors have identified an increased risk of prematurity or second trimester abortion secondary to cervical incompetence in 30% of patients who achieve pregnancy after this operation.[17,23] The recurrence rate following conization ranges from 0.13-13%.[17,23,26] Cervical conization is not considered a conservative treatment, but is required in the management of those patients in whom invasive carcinoma cannot be excluded by colposcopy.

In the Division of Gynecologic Oncology at the University of Louisville, cryosurgery has been employed to manage cervical intraepithelial disease after an adequate colposcopic examination.[14] In a review of 257 patients who have been managed to date, there has been a 14% recurrence rate. Recurrences were seen in all CIN categories. Only two of 37 patients that recurred had a more serious lesion than that for which they were initially treated and none had invasive disease. 92% of these recurrences were detected during the two initial post-treatment visits. In addition to the cryosurgery program, laser surgery is used. The initial recurrence rate in a five-year study recently published by one of the authors of this paper, (BJM), was in the order of 10%. More recent data suggests an anticipated recurrence rate of approximately 5%. Because of its precision of application, the laser probably will be more widely used in the future for the management of cervical dysplasia.

Following the conservative treatment of the patient with cervical intraepitheial neoplasia, postoperative evaluation should proceed every three months including a repeat colposcopic examination and pap smear. After two consecutive normal visits, the patient can be evaluated semi-annually. The same follow-up pattern should apply to patients treated by cone biopsy since recurrence rates with these techniques are similar.[4,11,21,22,16]

In conclusion, the following comments can be made:

1. Women at high risk for cervical neoplasia are those who began sexual activity at an early age and have had multiple sexual partners. Cancer screening in this group should proceed on an annual basis.

2. A pap smear must be taken from the transformation zone.

3. The false negative rate of a pap smear may be as high as 15%.

4. All pap smears showing dysplasia should be evaluated.

5. The preferred method of evaluation is colposcopy with directed biopsy.

6. Colposcopy must be performed by an experienced examiner who can correlate the visual interpretation and extent of the lesion with the biopsy and cytology information and design therapy.

7. The conservative outpatient management is encouraged, especially in young women desiring future childbearing.

8. An exophytic or ulcerative lesion of the cervix should be biopsied even if the pap smear is normal.

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Acute Renal Failure in the Surgical Patient

ANTHONY W. LEE, M.D. and DANIEL E. KENADY, M.D.

A review of the literature concerning acute renal failure (ARF) in the surgical patient is presented. The different etiologic categories of ARF (pre-renal, post-renal, and intrinsic) are discussed, with specific emphasis on the pathophysiology, diagnosis and treatment of acute intrinsic renal failure.

OVER the past decade, advances in medical technology have allowed the surgeon to see an increasing number of patients with acute renal failure. Geis and Iwatsuki cited several reasons for this, namely: 1) more high-risk patients are being recommended for surgery 2) advances in surgical technique lead to the performance of complex operations which are associated with a higher incidence of acute renal failure, and 3) preoperative contrast-radiographic procedures are being utilized more extensively.[1]

Despite the progress in medical care over the last decade, the mortality of patients with renal failure following surgical procedures is still in the range of 57-70%.[2]

Definition and Classification

Acute renal failure is a sudden impairment in renal function leading to a reduction in excretion of nitrogenous waste products as manifested by progressive azotemia which may or may not be accompanied by a reduction in urine output.

To properly diagnose and manage these patients, it is necessary to classify acute renal failure.

I. Acute Prerenal Failure—usually a functional renal insufficiency commonly caused by volume depletion or cardiovascular compromise. Oliguria occurs as a result of diminution of the glomerular filtration rate and an enhanced tubular reabsorption of salt and water.[3] The kidney, however, is physiologically normal initially and can excrete the end products in an economically small volume of water.[4]

II. Acute Postrenal Failure—usually an obstruction to urinary flow from either the bladder or kidneys. Hydrostatic pressure difference across the glomerular capillary wall is decreased leading to a fall in glomerular filtration rate.[4] Parenchymal damage may also be seen, particularly with prolonged obstruction.[4] The hallmark of postrenal failure is a history of sudden, often total cessation of urine output with brisk diuresis following relief of obstruction. A history of ureteral stones, benign prostatic hypertrophy and previous pelvic surgery is important.

III. Acute Intrinsic Renal Failure—usually a disruption of tubular function caused by renal ischemia and exposure to nephrotoxins following trauma, obstetric and surgical complications. When diagnosed early, it is almost always reversible. Other causes not commonly seen on the surgical service include glomerular, vascular and interstitial lesions.

With respect to urine output, acute renal failure can be subclassified into:

A. oliguric acute renal failure—The patients in this category have urine volumes less than 400 cc per 24 hours.[6] Oliguria in the strictest sense is defined as urine volumes in the range of 50-400 cc per 24 hours.[3]

B. non-oliguric acute renal failure—These patients have urine volumes $\geq$ 600 cc per 24 hours throughout their azotemic phase.[7] This entity is found predominantly after burns[8] or traumatic injury.[7] Also, nephrotoxic failure occurs more frequently as the non-oliguric category.[7]

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Pathophysiology and Pathology

Although several mechanisms for acute intrinsic renal failure have been proposed in experimental animal models, their application to humans have been far from convincing. The three most commonly suggested mechanisms include: 1) Tubular obstruction by intraluminal casts and interstitial edema; II) Passive back flow (necrosis of tubular epithelium allows increased permeability and back diffusion of glomerular filtration secondary to changes in renal hemodynamics.

The classic morphological studies in this field were done by Oliver et *al*[10] who classified the lesions into two main groups: The first lesion is that of nephrotoxic tubular necrosis (toxin-induced) limited to the proximal convoluted tubule. Both kidneys are involved and lesions are widespread. The basement membrane is usually intact. The second lesion is called tubulorrhexis (focal cortical ischemia) and affects any part of a nephron in a random fashion. The basement membrane is disrupted. Acute reversible intrinsic renal failure secondary to burns, trauma or operations exhibits both pathologic changes. The non-oliguric form although more variable may show the same morphologic changes.[11]

Diagnosis and Treatment

To diagnose acute intrinsic renal failure, one needs to exclude acte pre and post renal failure as the management of these entities are different.

Prerenal failure is usually suggested by the history and physical examination. It is manifested by oliguria and vital signs (tachycardia and hypotension) compatible with volume depletion. This suspicion can be confirmed by a urinary response to volume expansion. A history of extrarenal fluid losses (i.e. from the gastrointestinal tract, excessive insensible loss, and "third space" losses as in bowel obstruction, trauma, pancreatitis, and following laparotomy) is highly suggestive. In difficult cases, central venous pressure (CVP) monitoring or pulmonary capillary wedge pressure (PCWP) monitoring will aid in the diagnosis. Accurate interpretation of serum and urinary indices from spot urine examination is important in the diagnosis. (Table II)[6]

When prerenal failure is suspected, a trial of volume expansion should be started cautiously, usually with normal saline or lactated Ringer's at 10-15 cc per kg per hour.[4] The specific type of fluid depends on the kind of loss incurred. An increase in urinary output confirms the diagnosis. However, a negative response should make one consider acute intrinsic renal failure.

Another common cause of post-operative prerenal failure is encountered in patients with congestive heart failure, with oliguria usually secondary to a low cardiac output. Physical signs of heart failure include distended neck veins, rales on chest auscultation, ventricular gallop, and ankle edema. The chest x-ray is helpful, and in severe cases, CVP and PCWP monitoring will aid in diagnosis and management.

If heart failure is established and volume repletion is deemed sufficient, the management should include measures to improve cardiovascular function. These include strict fluid restriction, diuretics, oxygen and judicious use of digoxin.

Postrenal failure is usually diagnosed from the history. Serum and urinary indices are not helpful because there is too much variability. The use of urethral catheter, excretory urography and retrograde pyelography in that order usually leads to the correct diagnosis.[5]

Acute reversible intrinsic renal failure is manifested by isosthenuria and progressive azotemia with or without oliguria. When cardiac output, CVP, and PCWP are normal, but renal function has not improved, acute intrinsic renal failure is likely. The oliguric type has four phases[5]: I) oliguric-anuric phase with a mean duration of seven to 12 days (range one to more than 40 days). II) Early diuretic phase—slight increase in urine output with continuing azotemia (mean duration is between four to seven days). III) Late diuretic phase—marked increase in urine output with decreasing azotemia. IV) Convalescent phase.[5] In the non-oliguric variety, progressive azotemia

TABLE I

Common Causes of Acute Renal Failure in Surgical Patients

A. Prerenal failure	C. Acute tubulovascular nephropathy
*Hypovolemia	*Trauma with shock
*Vascular occlusion	*Crushing injuries & burns
*Myocardial failure	*Transfusion reactions
B. Postrenal failure	*Sepsis
*Ureteral obstruction	*Hemorrhagic shock
(stones, tumors, iatrogenic)	Nephrotoxic nephropathy
	*Aminoglycoside antibiotics

Table I illustrates the more common causes of acute renal failure.

is the only clue as urine outputs are ≥600 cc/ 24 hours.

Serum and urinary indices are important in establishing the diagnosis. (Table II) They should be obtained before diuretics are instituted. The urine specific gravity and urine/plasma osmolality measure renal concentrating ability. One has to note that glucose and iodinated contrast media can alter these parameters. The urine/ plasma creatinine ratio is an excellent index of water reabsorption because creatinine is filtered but not reabsorbed. The best index for sodium reabsorption is the fractional excretion of filtered sodium (FE_{NA}) because it corrects for the effects of water reabsorption.[12] This is calculated as follows:

$$FE_{NA} = \frac{\frac{U}{P}}{\frac{U}{P}_{Creat.}} \times 100 = \%.$$

In prerenal failure, the FE_{NA} is low, usually less than 1% as there is an increased reabsorption of sodium.[12] It is higher in intrinsic renal failure (≥3%).[13] In chronic renal failure patients who develop a superimposed acute renal failure postoperatively, indices are difficult to interpret because of pre-existing "acute renal failure" indices.

Before accepting the diagnosis of oliguric acute renal failure, one should attempt to increase the urine output with diuretics. Griffith *et al* recommend a trial dose of 12.5 grams of mannitol IV over a three-minute period. A urine output increasing to 40 cc per hour within two hours suggests prerenal failure.[5] If urine output does not increase, one can repeat the same dose but note that when using mannitol one has to assure adequate ECF volume. Furosemide, at a starting dose of 80 mg IV, doubled every two hours, can be utilized up to a total of 1200 mg.[5] Large doses should be given over a 20-minute period to prevent ototoxicity.[5]

The goals of management of oliguric acute renal failure are as follows: I) prompt correction of fluid and electrolyte derangements II) provision of optimal and appropriate nutrition III) cessation or adjustment of drug dosages IV) early dialysis when conservative therapy fails.

Fluid restriction should be imposed with replacement of measurable losses (plus 500-600 cc per 24 hours for insensible loss), usually with D_5W. In the normal 70 kg. man, insensible loss from the skin and lungs is 12 cc per kg. or roughly 850 cc per day.[5] The water of oxidation (about 300 cc per day) is considerated as intake, thus the replacement of 500-600 cc per day.[5] The post-operative patient without any caloric intake should lose 0.2 to 0.5 kg. per day with normal hydration.[9] Thus daily weights are helpful in management.

The major electrolyte of concern is potassium as hyperkalemia is lifethreatening. Potassium should not be given to any patient who has inadequate urine output. This is always a concern in the post-operative patient who develops acute renal failure because of his acidotic catabolic state and reabsorption of old blood, both of which promote hyperkalemia. Therapy should be instituted rapidly for serum potassium levels approaching 6 meq/liter[9] or when electrocardiographic changes (peaked T waves, wide QRS intervals, loss of p waves, sinoventricular or idioventricular rhythm) are noted. Ten units regular insulin in one ampule of $D_{50}W$ will shift

TABLE II

Serum and Urinary Indices in Acute Renal Failure

	"Classic" ARF			
	Oliguric	Nonoliguric	Prerenal	Postrenal (Obstructive)
BUN/P_{Cr}*	≤10-15/1	≤10-15/1	≥20/1	10/1
U/P_{Cr}	≤ 20/1	≤ 20/1	≥20/1	20/1
U/P_{UN}	≤ 10/1	≤ 10/1	≥20/1	10/1
U/P_{Osm}	≤1-1.5	≤1-1.5	≥ 3.0	≤1-1.5
Urine Na^+ (mEq./l.)	≥40-50	≥30-40	20	Variable
FE_{Na+} (%)	≥3	≥3	≤1	Variable
U_{Na+}/U/P_{Cr}	≥1.0	≥1.0	≤1.0	Variable
Urine sediment	"casts, renal tubule cells"		Not helpful	Scanty, crystals or pyuria possible

*BUN = blood urea nitrogen concentration; P_{Cr} = plasma creatinine concentration; U/P_{Cr} = urine to plasma creatinine concentration ratio; U/P_{Un} = urine to plasma urea nitrogen concentration ratio; U/P_{Osm} = urine to plasma osmolality ratios.

potassium intracellularly transiently. Calcium Salts (10%) will antagonize its effects on the myocardium but should not be used when a patient is on digitalis. One ampule of sodium bicarbonate causes alkalinization and, therefore, an intracellular shift. For permanent control, sodium polystyrene sulfonate (kayexalate), an ion-exchange resin, is given as p. o. (20 gm kayexalate + 20 cc of 70% sorbitol) or as a retention enema (50 gm kayexalate + 50 cc of 70% sorbitol) several times a day. Other electrolyte abnormalities include: hypocalcemia, which usually does not require treatment, and hyperphosphatemia, which is treated with aluminum hydroxide (Amphogel).

Dietary management should include intravenous infusion of hypertonic glucose with essential L-amino acids to inhibit gluconeogenesis. The infusion of "renal failure fluid" was shown to improve survival.[14] If the gastrointestinal tract is functioning, "Amin-aid" is used.

Dialysis is indicated when conservative measures fail to control hypervolemia, hyperkalemia, metabolic acidosis, or progressive azotemia (BUN ≥120 mg or rising at 20 mg/day).[9]

In the non-oliguric variety, the renal failure is often not recognized. The danger here is that despite a large urine volume, this is often fixed and unresponsive to fluid intake.[9] Serious therapeutic errors such as overhydration, pulmonary edema and hyperkalemia may occur.[15] Adjustment of dosages of nephrotoxic drugs and drugs excreted by the kidney are also necessary in this entity. These patients usually do not require dialysis.

Complications

Complications of acute renal failure include: severe sepsis, urinary tract infections, acute respiratory distress, gastrointestinal bleeding and jaundice.[5] Specific therapy should be instituted when these arise.

Summary

Acute renal failure occurs in post-operative patients as well as following burns, trauma, sepsis, and nephrotoxic drug therapy. Mortality is still in the range of 60%.[13] The non-oliguric variety, which is not infrequent, has a lesser morbidity and mortality than the oliguric type.[7] Recognition and prompt correction of potential etiologic factors (see Table III)[1] pre-operatively, proper classification and early recognition of renal failure, together with serum and urinary diagnostic indices are important for effective therapy and improved survival.

TABLE III*

Acute Renal Failure in the Surgical Patient
Etiologic Factors

I. Chronic Dehydration
 Examples: External Fistulae
 Diuretic Therapy

II. Acute Dehydration
 Examples: Burns, Trauma, Pancreatitis, Bowel Obstruction, Gastrointestinal Bleeding

III. Iatrogenic Dehydration
 Examples: Contrast Media, Enemas, Nasogastric Suction

IV. Nephrotoxic Agents
 Examples: Aminoglycosides

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1982 KMA ANNUAL MEETING



September 20, 21, 22, 23, 1982



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October 15-16, 1982

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Friday, October 15

Moderator: John A. Lloyd, M.D.
Pulmonary Disease Specialist
Louisville, KY

I. LECTURE SERIES—**Chronic Obstructive Pulmonary Disease**

1:00 p.m.—"What's New in COPD"
Emery E. Lane, M.D.
Associate Professor of Medicine
University of Louisville, School of Medicine

1:30 p.m.—"Recent Advances in the Use of Theophylline for Patients with COPD"
Stanley R. Rehm, M.D.
Chief, Pulmonary Section
Veterans Administration Medical Center
Lexington

II. 1982 L. E. SMITH LECTURE

2:00 p.m.—"Aggressive Surgical Therapy for Thoracic Neoplasms"
Martin S. McKneally, M.D., Ph.D.
Associate Professor of Surgery
Division of Cardiothoracic Surgery
Albany Medical College

BREAK—2:45 p.m.

III. SYMPOSIUM—**Critical Care of Pulmonary Patients**

3:00-5:00 p.m.

Panel:

Respiratory Therapist— Jean E. Norwood, R.R.T.
Director, Respiratory Therapy Services
Jewish Hospital, Louisville

Nurse— Carolyn Cunningham, R.N., M.S.N., C.C.R.N.
Pulmonary Clinical Nurses Specialist
VA Medical Center, Louisville

Pulmonary Physician— Joel A. Horowitz, M.D.
Assistant Professor of Medicine
University of Louisville, School of Medicine

Thoracic Surgeon— Edward P. Todd, M.D., Ph.D.
Professor and Chairman, Division of Cardiovascular and Thoracic Surgery
University of Kentucky Medical Center Hospital

5:00 p.m.—KTS BUSINESS MEETING

6:00-8:00 p.m.—COCKTAILS AND DINNER

8:00 p.m.-12 midnight—DANCE
Pete Conley Orchestra

Saturday, October 16

Moderator: Edward P. Todd, M.D., Ph.D.
Professor and Chairman
Division of Cardiovascular and Thoracic Surgery
University of Kentucky Medical Center Hospital

ORIGINAL PAPERS

8:00 a.m.—COFFEE AND DOUGHNUTS

8:30 a.m.—**Response of Cat Airways and Intralobar Artery to Vasoactive Intestinal Peptide (VIP)**
Ralph J. Altiere, M.D.; John L. Szarek, M.D.; and Louis Diamond, Ph.D.
University of Kentucky, College of Pharmacy

8:45 a.m.—**Salicylate—Induced Pulmonary Edema**
James S. Walters, M.D.; John H. Woodring, M.D. Carol B. Stelling, M.D.; and Harold D. Rosenbaum, M.D.
University of Kentucky, College of Medicine
Department of Diagnostic Radiology

9:00 a.m.—**Digital Vasocular Imaging**
Mary L. Harty, M.D. and T. Y. Huang, M.D.
University of Louisville, School of Medicine
Department of Diagnostic Radiology

9:15 a.m.—**Combined Medical and Surgical Approach to the Cure of Atypical Mycobacteria Infections**
Cordie C. Coordes, M.D.; Marcus L. Dillon, M.D., and H. Mac Vandiviere, M.D.
University of Kentucky Medical Center Hospital
Division of Cardiovascular and Thoracic Surgery

9:30 a.m.—**Bronchial Carcinoid Tumor: Diagnosis and Management**
Sibu P. Saha, M.D.; Porter Mayo, M.D.; and Graydon A. Long, M.D.
Thoracic and Cardiovascular Surgery
Lexington

9:45 a.m.—**Right Atrial Rupture Secondary to Blunt Chest Trauma**
Gary L. Griffith, M.D.; John V. Zeok, M.D.; William T. Mattingly, M.D.; and Edward P. Todd, M.D., Ph.D.
University of Kentucky Medical Center Hospital
Division of Cardiovascular and Thoracic Surgery

10:00 a.m.—**Endobronchial Radioactive Implantation in the Treatment of Recurrent Bronchogenic Carcinoma**
Marcus Dillon, M.D.; Oscar A. Mendiondo, M.D.; and J. Larry Beach, Ph.D.
Departments of Surgery and Radiation Medicine
UK Medical Center and VA Hospital
Lexington

BREAK—10:15 a.m.

II. CASE REPORTS

10:30 a.m.—**Innovations in the Management of Lung Cancer**
Marcus Dillon, M.D. and Oscar Mendiondo, M.D.
Departments of Surgery and Radiation Medicine
UK Medical Center and VA Hospital
Lexington

10:40 a.m.—**Recurrent Atelectasis of the Left Lung Caused by Peribronchial Lymphadenopathy**
Sibu P. Saha, M.D.; Porter Mayo, M.D.; Graydon A. Long, M.D.; and William T. Mattingly, M.D.
Lexington

10:50 a.m.—**Endoscopic Treatment of Hemoptysis Secondary to Broncholithasis**
Charles E. Martin, M.D.
Thoracic and Cardiovascular Surgery
Lexington

III. 1982 L. E. SMITH LECTURE

11:15 a.m.—"Biological Treatment of Lung Cancer"
Martin S. McKneally, M.D., Ph.D.
Associate Professor of Surgery
Division of Cardiothoracic Surgery
Albany Medical College

12:00 noon—ADJOURN

Phone (502) 363-2652 for more information



Alkaline Reflux Gastritis

PAUL CRONEN, M.D.,* RONALD L. RICHARDSON, M.D.,†
HIRAM C. POLK, JR., M.D.*

The syndrome of alkaline reflux gastritis that follows operative procedures for gastroduodenal disease can be a challenge in both diagnosis and treatment. Its symptoms and endoscopic findings can be nonspecific and often overlap with apparently normal postgastrectomy states. The factors described in the following case history fulfill the criteria for a diagnosis of reflux gastritis with its cause based on unusual gastric anatomy.

Case History

A 31-year-old white man who had undergone several gastric procedures for ulcer disease was admitted to the hospital with complaints of epigastric pain, nausea and vomiting. The nausea usually occurred about an hour after meals and was relieved when the patient vomited small amounts of clear greenish fluid. He also had nocturnal regurgitation on occasion.

The patient's ulcer history dates back to age 18 when he had his first operation for "bleeding ulcer." According to the patient's own description, the ulcer was oversewn. Two years later, in 1967, recurrent bleeding from duodenal ulcer disease occurred and a vagotomy and pyloroplasty was performed. Ten years later, recurrent hemorrhage occurred and a hemigastrectomy and Billroth I reconstruction were reported to have been performed. The patient did well until 1979 when he began to vomit yellowish material. A diagnosis of bile reflux was made and a Roux-en-Y procedure was performed. After an initial symptom-free time, his symptoms recurred. The patient underwent a trial of cholestyramine and antacids, but did not obtain relief.

From the *Departments of Surgery and †Medicine, University of Louisville School of Medicine, Louisville, Kentucky.

Endoscopy, performed at another hospital, showed bile refluxing into the patient's stomach. When reoperation was undertaken in January 1980, the Roux-en-Y limb was lengthened. Again, the patient did well for only a short time before his symptoms recurred. He was then referred to the University Surgical Service at Norton Division of Norton-Kosair-Children's Hospitals.

His other surgical history includes an appendectomy in 1976 and a cholecystectomy in 1977. Physical examination was normal except for the multiple surgical scars across the abdomen.

The results were normal of routine laboratory studies, except for a hemoglobin of 11.8 g/dl with normocytic indices. An upper GI series showed a double outlet gastric pouch (Fig. 1). A gastroduodenal anastomosis was shown to be narrowed and a gastrojejunostomy with somewhat less stenosis was present. There was slow emptying.

Endoscopy was performed. A flattened gastric mucosa with marked erythema was noted. Approximately 50 mL of greenish bilious material was found in the stomach. The gastroduodenal anastomosis was appreciated and the ampulla of Vater was about 3 cm beyond readily emptying bile. The gastrojejunostomy was narrow, barely admitting the flexible endoscope. Biopsies of the gastric mucosa were compatible with gastritis (Fig. 2).

The patient's gastric anatomy was quite different from the historical information acquired as the gastroduodenostomy apparently had never been taken down.

Our working diagnosis was that of legitimate bile reflux gastritis and the operative plan was for division of the gastroduodenostomy and revision of the gastrojejunostomy. At operation, multiple adhesions were found. The gastroduodenal anastomosis appeared to be stenosed in such a fashion that bile readily flowed into the stomach; this was divided and



Fig. 1: Upper gastrointestinal series which demonstrates a dual gastric outlet.

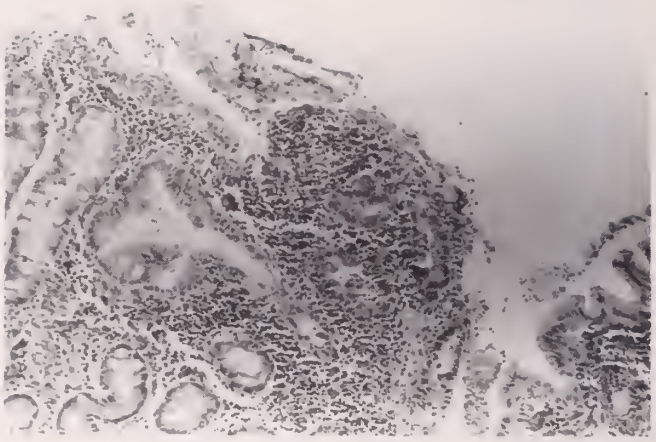


Fig. 2: Gastric biopsy showing lymphocytic infiltration compatible with gastritis.

a duodenal stump was created. The gastrojejunostomy was revised. The previous jejunojejunostomy was 30-35 cm from the stomach and was patent (Fig. 3). Sump drainage was employed.

The patient did well until the tenth day postoperatively when bile was found draining into the saratoga sump. A sinogram showed a duodenal stump leak adjacent to the drain. This was treated by advancing the sump and continuing suction. A spontaneous closure occurred and the patient was discharged on the 18th postoperative day.

Discussion

Bile alkaline reflux gastritis, which also is termed bilious vomiting in the British publications, occurs as a result of destruction or removal of the pyloric sphincter and was first noted as a complication of gastroenterostomy in 1881.[1] The syndrome as presented here, however, has only been studied clinically and physiologically in the 1960s and has been further documented with the widespread use of flexible fiberoptic endoscopy.

It is alleged that the incidence of bile reflux varies from 5 to 35% in all patients undergoing a gastroenterostomy[2,3] with approximately 1 to 3%[4] of all patients requiring an additional corrective operative procedure. There appears to be a male-to-female ratio of 2:1; no particular age range is associated with the disease. The most common type of gastric procedure associated with bile reflux is a hemigastrectomy and gastrojejunostomy which may only reflect its common usage. The relative frequency with which other procedures are used are noted in Table 1. Cholecystectomy has recently been implicated as a possible cause due to the unregulated flow of bile into the duodenum and stomach.[7]

Presenting symptoms primarily revolve around epigastric pain, nausea, vomiting and bilious vomiting. The pain is most frequently described as constant; it is not relieved by food or antacid ingestion. The vomiting is usually bilious and is seldom related to meals. Patient's weight loss is often as much as 10 to 15 pounds, but this can vary widely. Melena and upper gastrointestinal hemorrhage often occur secondary to the gastritis.

Laboratory studies often uncover an iron deficiency anemia. Achlorhydria is present in more than 50% of patients with bile reflux and in almost all of the remaining patients.[6] These findings are based on Histolog or Hollander's testing. Upper gastrointestinal studies are minor aids in making the diagnosis of bile reflux, but they should be obtained to define the anatomy and possibly to exclude other benign lesions.

The diagnosis of bile reflux is dependent upon endoscopic findings. Changes frequently found include an inflamed, friable mucosa that is diffuse and is not confined to the peristomal area. Multiple superficial ulcerations may or may not be found; the mucosa may easily bleed upon contact; and a continuous bile flow is sometimes found. "Bile stained lakes" are often described, but these have been reported to occur in 30% to 80% of endoscopies done for various other disorders.[8] Goldner[8] has shown that the concentration of bile acid has no relationship to histologic evidence of gastritis. This suggests that bile is only one link in the pathogenesis of reflux gastritis. Goldner also makes the point that there may be histologic evidence of gastritis in some 50% of "normal" endoscopic exams, compared to a 90% positivity rate in patients with endoscopic evidence of gastritis.

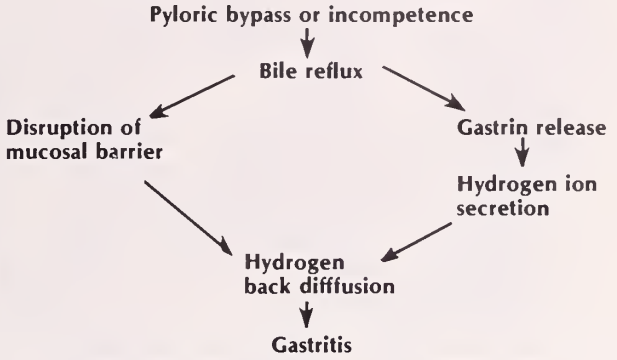
Recently, Warshaw[9] described a provocative test that utilizes intragastric alkali infusions as an accurate

TABLE 1. *Relative frequency of gastric procedures in patients with alkaline reflux gastritis.

Procedure	No.	Relative Percentage
Billroth II	75	60%
Billroth I	20	16%
Gastroenterostomy	16	13%
Vagotomy & Pyloroplasty	12	10%
Other		1%

*Complied from Wolfler,[1] Kennedy and Green,[5] and Ahmad et al.[16]

TABLE 2. Theoretical pathophysiology of alkaline reflux gastritis.



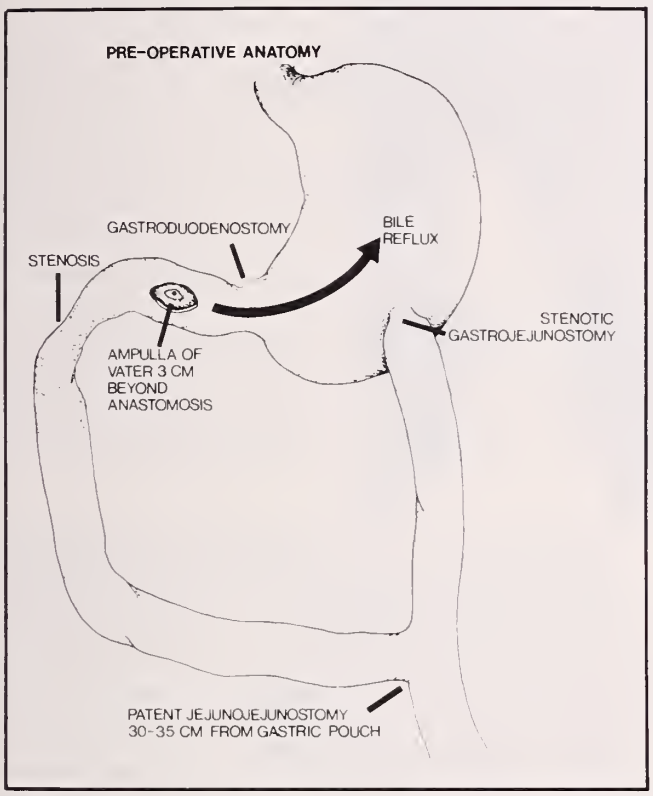


Fig. 3: Preoperative gastric anatomy included a gastroduodenal anastomosis with a narrowed duodenal segment, and a stenotic gastrojejunostomy.

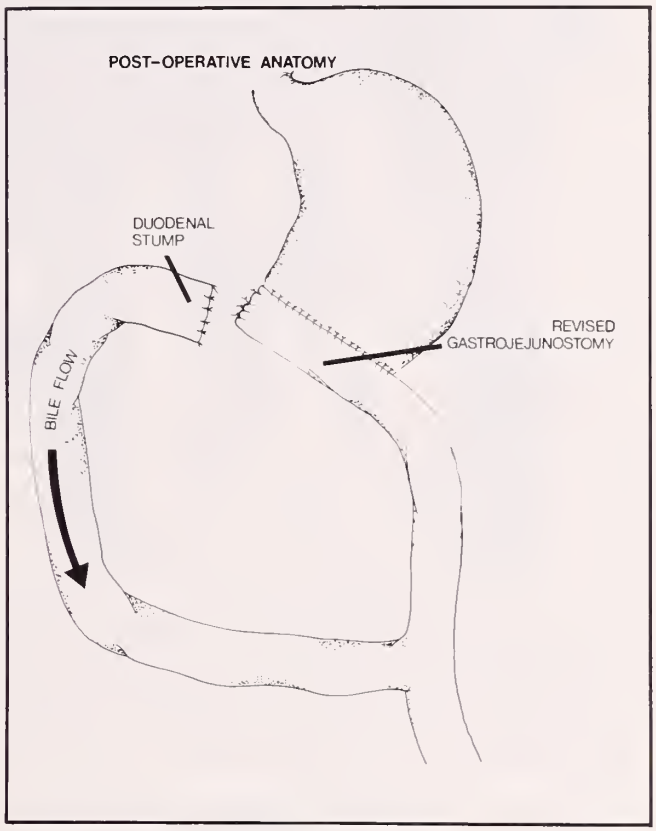


Fig. 4: Postoperatively, a Polya anastomosis was constructed from the Roux-en-Y limb and the duodenal anastomosis divided.

diagnostic test; however, confirmation of its usefulness will be required.

Histologic examination usually shows a chronic inflammatory response, edema and elongation and corkscrewing of the gastric glands. Other changes include a decrease in the number of chief and parietal cells.[2]

The pathophysiology is obviously initiated by reflux of duodenal contents into the gastric pouch. Bile salts have been shown experimentally to disrupt the mucosal barrier which can lean to the so called "back diffusion" of hydrogen ions into the gastric wall.[10]

Other studies[2] have shown that bile in combination with pancreatic and jejunal contents had increased destructive effect. Also noted was the fact that bile salts initiate a gastrin release, which, in turn, causes further hydrogen ion release.



Fig. 5: Roux-en-Y and Tanner 19 procedures depicted as remedial operations for alkaline reflux following Billroth I & II reconstructions respectively.

Gastrin has been shown to stabilize and maintain the mucosal barrier. Decreased gastrin production due to changes in cell populations[4] has been found to occur after Billroth II procedures are performed. This may explain why the Billroth II anastomosis is more commonly associated with bile reflux gastritis. Gastric emptying and "contact" time may also be implicated, as they were in this patient.[11]

The missing clinical item in these evaluating relationships is how often bile is found endoscopically in the stomach with the requisite histologic changes in patients who are well after operation destroying the pylorus. Until this data is in hand, one must be cautious in relating postgastric surgery complaints to such a trite and coincidental sequence of events.

Treatment of this disorder is primarily surgical. Medical treatment with antacid and cimetidine are unsuccessful. Binding of the bile salts with cholestyramine, and ion exchange resin is an intellectually appealing idea, but has been shown to be ineffective.[12]

The essence of surgical treatment is diversion of the biliary stream away from the gastric mucosa. Numerous procedures are available but only three are readily advanced. Creation of a Roux-en-Y limb can be performed when a prior Billroth I anastomosis is present. The key to its success is the placement of the jejunojejunostomy more than 40 cm below the gastrojejunostomy. A Billroth II anastomosis can be convected into a so-called Tanner 19. Interposition of an isoperistaltic segment of jejunum between the stomach and duodenum, known as the Henley loop, has also been used.[6]

Results from the Drapanas series,[2] primarily utilizing the Roux-en-Y and Tanner 19 operations, showed an 85% "excellent" result rate, which meant it relieved all symptoms. Patients were followed up for four years. The Mayo Clinic group [13] reported an 84% rate of "significant" improvement with the Roux-en-Y method, but only a 50% improvement rate with the jejunal interposition. Our own experience at the local Veteran's Administration Medical Center has not been that dramatic, yielding only a 50% rate of complete remission of symptoms with the Roux-en-Y technique and an even poorer 20% success rate with the Tanner 19. This outcome is much like previous studies from our Department, in which remedial gastric surgery was not as effective as that alleged by others.[16] Until these data are more fully understood, the dramatic case involved notwithstanding, remedial gastric operations, especially for bile reflux gastritis, should be undertaken with care.

TABLE 3. Composite "excellent"* result rate.

Group	Roux-en-Y	Tanner 19	Jejunal Interposition
Tulane[2]	86%	100%	100%
Mayo Clinic[13]	84%	—	50%
Louisville[6]	50%	20%	—
Royal Victorian Hospital[5]	71%	—	—
Edinburgh[14]	50%	—	93%
Vanderbilt[15]	62%	—	70%

*"Excellent" = relief of symptoms

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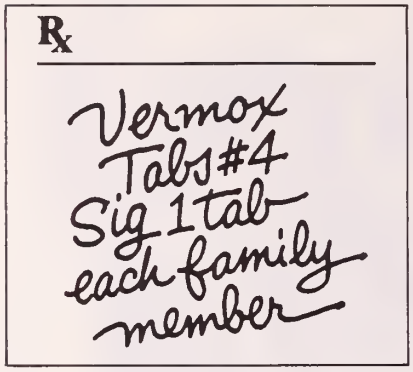
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INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

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The Physician's Sleep Glossary

Some common sleep laboratory terms

poly•som•no•graph. An instrument which simultaneously records by electrodes physiological variables during sleep—for example, brain activity (EEG), eye movements (EOG), muscle tonus (EMG) and other electrophysiological variables. These readings indicate precisely when patients fall asleep, how many wake periods they experience, the quality of sleep and the duration of sleep.

sleep la•ten•cy. The period of time measured from "lights out," or bedtime, to the commencement or onset of sleep.

wake time af•ter sleep on•set. Intervals of time spent awake between onset of sleep and the end of the sleep period. The polysomnograph registers the length and frequency of the intervals.

to•tal sleep time. The amount of time actually spent in sleeping. This is estimated by subtracting wake times from the period encompassed by the onset and the termination of sleep.[1]

REM/NREM. 1. REM, or rapid eye movement, sleep is "active"—characterized by increased metabolic rates, elevated temperature and arousal-type EEG patterns. 2. NREM, or non-rapid eye movement, sleep represents "quiet" sleep stages. There are four distinct stages of NREM sleep.[2]

re•bound in•som•nia. A statistically significant worsening of sleep compared to baseline on the nights immediately following discontinuation of sleep medication.[3]

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References: 1. Williams RL, Karacan I: Introduction, chap. 1, in *Sleep Disorders: Diagnosis and Treatment*, edited by Williams RL, Karacan I, Frazier SH. New York, John Wiley & Sons, 1978, p. 2. **2.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **3.** Kales A *et al: JAMA 241*:1692-1695, Apr 20, 1979. **4.** Kales A *et al: J Clin Pharmacol 17*:207-213, Apr 1977 and data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Kales A: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **6.** Kales A *et al: Clin Pharmacol Ther 19*:576-583, May 1976. **7.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 15, 1978. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Dement WC *et al: Behav Med 5*(10):25-31, Oct 1978. **10.** Vogel GW: Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **11.** Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington, DC, May 3-7, 1971. **12.** Pollak CP, McGregor PA, Weitzman ED: The effects of flurazepam on daytime sleep after acute sleep-wake cycle reversal. Presented at the 15th annual meeting of the Association for Psychophysiological Study of Sleep, Edinburgh, Scotland, June 30-July 4, 1975. **13.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **14.** Kales A, Kales JD: *Pharmacol Physicians 4*(9):1-6, Sep 1970. **15.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

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Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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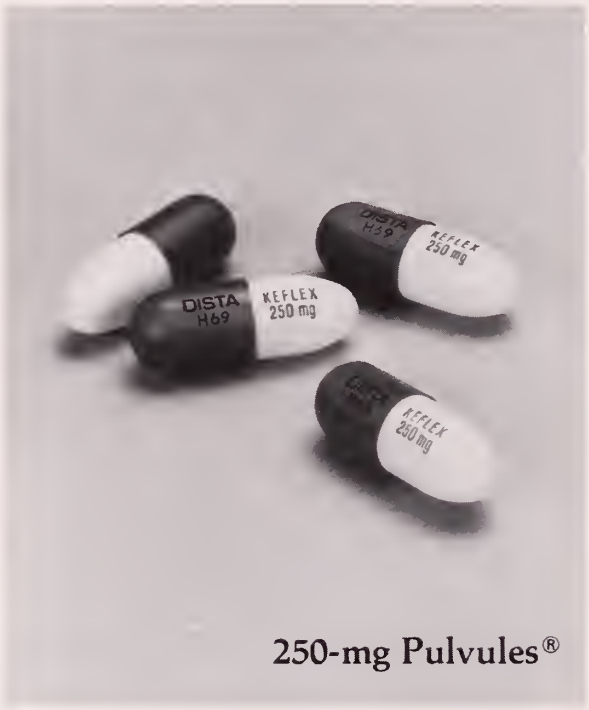
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EDITORIAL

The Community Health Castle

The old School of Medicine of the University of Louisville looks and smells marvelously better than ever it did in our old fun-filled, carefree student days. The transformation is incredibly salutary and will inspire a fond, sentimental pride in its graduates throughout the state, even those who preferred the prior plan to replace it with a parking lot. The salvation of the building was a huge problem and risked the ruination of the medical foundation of the Jefferson County Medical Society, had it failed. The project is not complete, but sufficient progress is in place that success is in sight.

The foundation proceeded with bold courage and too little money to execute the project in such stages as could be provided while faithfully and with determination working to acquire more funds. Now the leasing of space in the Community Health Building to nonprofit health related organizations has been sufficiently successful to justify faith in the plan.

The second floor meeting space combined with the Health Education Center and living museum is the superior achievement.

That the Medical Foundation Trustees and its Renovation Steering Committee have achieved such a beautiful result in only five years attests to the boldness and continual work and dedication that these few men have contributed. That the Community Health Building is such a treasure for all physicians in the state is of central importance to its beauty and future.

The mandate to create a permanent home for the Jefferson County Medical Society was present when the Medical Foundation was born in 1958. The President of the Medical Foundation from 1958 to 1982, Sam A, Overstreet, has given time, work, money and imagination to the foundation during his entire term. We think it is an apt and satisfying climax to the tribute he has paid the foundation and the foundation paid him. We are grateful for his persuasive and dedicated vision and contribution.

A. Evan Overstreet, M.D.

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MEDICAL STUDENT SECTION

The following is a report of the main actions of the AMA-Medical Student Section (MSS) at the annual convention from June 11-13, 1982, in Chicago. Of particular interest, are the items under Membership. Prior to this year, there has been no policy on membership offers, such as Ohio's, to their medical students. Similar proposals have been made in other states, including Kentucky, and this convention has adopted a policy concerning such offers.

June 11-13, 1982
Downtown Chicago Marriott Hotel

Representatives from about 70 medical schools attended the AMA-MSS business meeting. Twenty-one resolutions, plus 12 reports, were submitted for consideration. Nine resolutions were approved and sent on to the AMA House of Delegates and Reference Committee.

The main business was as follows:

Student Loans

A policy on student loan collections was established. The general idea was to increase collections without jeopardizing future student loans. Also, the Illinois State Medical Society raised funds for a new student loan program, so the Governing Council was charged with studying actions in other states, and reporting back on setting up similar programs in other states.

Environment

Three resolutions were coalesced into one, which issued a general statement supporting a strong EPA, a strong enforcement of gasoline lead standards, and continuing enforcement and inspection of all dumping of hazardous wastes.

Nuclear War

There were four resolutions submitted to the MSS. All four were discussed and then dropped in lieu of support of AMA Resolution 10, which sets up an Ad Hoc Committee. This committee will study the position of the AMA and report back on the medical consequences of nuclear war, plus the ability of the AMA to help prevent nuclear war.

Drug Promotion

The MSS is now on record as supporting study of the marketing of drugs by U. S. pharmaceutical companies in developing countries. Much concern about "drug dumping" was raised, and the issue needs to be studied further.

Public Health

The MSS adopted policies to give statuatory authorization to a federal Office on Smoking and Health, and to support efforts to reinstate rules requiring air bags or automatic seat belts in 1984-model-year cars. The MSS also called on the AMA to study the new vaccines for pneumococcal pneumonia, influenza, and hepatitis B. The MSS also supported efforts to establish more community health clinics with student involvement, similar to the GLOH clinic in Louisville.

Membership

This was the topic which raised the most debate. The Ohio State Medical Association (OSMA) gave free AMA membership to all Ohio medical students. The students could refuse membership by returning a postcard. The MSS heard some heated debate on this issue, and, in the end, established policies to: (1) recommend that any memberships require positive, not negative, action by the students, (2) oppose full subsidization of student memberships by any society, except for a one-year introductory period, (3) not oppose partial subsidization, (4) support more student representation in state delegations proportional to the number of student members, and (5) call for the AMA to study all state association recruitment efforts.

Further, the MSS called for a review of the MSS dues structure, and a review of student representation in the state.

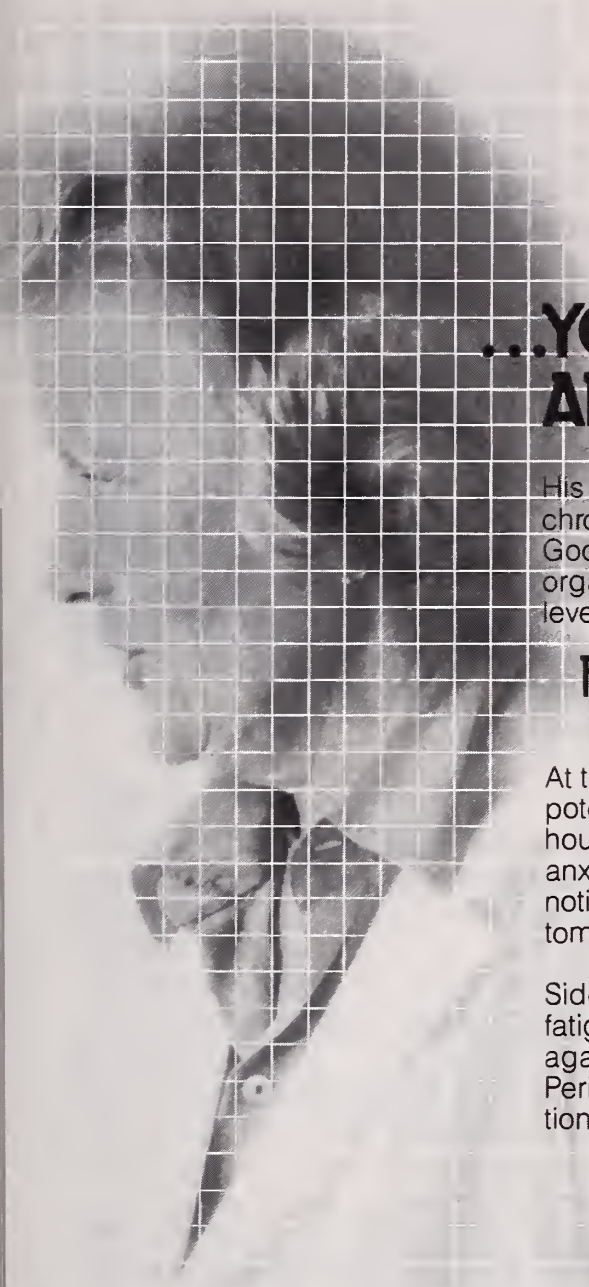
Miscellaneous

The MSS endorsed training of physicians in sign language and other communications with deaf patients. The MSS now opposes the notification of parents if a minor requests contraception, as per proposed rules of the Department of Health and Human Services.

Walter Steven Wilson
AMA-MSS Alternate Delegate
KMA-MSS President
University of Louisville

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Before prescribing, please consult complete product information, a summary of which follows:
Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.
Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.
Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice, periodic blood counts and liver function tests advisable during long-term therapy.
Dosage: Individualize for maximum beneficial effect. *Adults*: Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d.; alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients*: 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children*: 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).
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AUXILIARY



Ellen C. Sklar

SEPTEMBER (septem)—so named as the seventh month of the ancient Roman Year, which began with March or the ninth month of the present calendar year—is a busy time for the Auxiliary. The Auxiliary of the Kentucky Medical Association will hold the Fall Board meeting on September 21, 1982, at the Hyatt Regency in Lexington. The business meeting will be followed by "A Bluegrass Afternoon."

The Fayette County Medical Auxiliary regrets that there will not be a Hospitality Room this year for physicians and spouses due to the exorbitant cost of hotel catering. The Auxiliary, as a non-profit organization, could not underwrite this expense. The FCMA will help in other ways to make your stay in Lexington an enjoyable one, so call on them! The complete schedule is detailed below.

September 20	12:00-4:00PM	—Registration and Information-Lobby (Pick up tickets for luncheon & tours)
	2:00-3:00PM	—Finance Committee Meeting-President's Room
	3:00-4:00PM	—Planning Committee Meeting-President's Room
	4:00-5:00PM	—Membership Committee Meeting-President's Room
	6:00PM	—KEMPAC Reception & Dinner-Hyatt Ballroom
September 21	8:00-11:00AM	—Registration and Information-Lobby (Pick up tickets for luncheon & tours)
	9:00-11:00AM	—Fall Board Meeting, Regency Ballroom West, Main Floor
	11:30AM	—Bus Leaves High Street Entrance of Hyatt for "A Bluegrass Afternoon"
	4:30PM	—Expected return from tour to the Hyatt
	5:30PM	—President's Reception-AKMA and KMA
September 22	10:00 AM	—Membership Tea at home of Doctor & Mrs. William Meeker, 417 Fayette Park, Lexington
	9:00-5:00PM	—CPR Certification & Recertification for Physicians, Spouses, and Nurses

The AKMA's Army/Navy tablecloth of linen and lace will be on display at the AMA-ERF booth at the KMA Convention Center. The cloth is a labor of love not only by the counties who embroidered Kentucky wild flowers on squares of white linen but also by our state AMA-ERF Chairman, Dorothy Rush, who assembled the squares of linen and lace. The squares are bordered by 3 and ½" of linen and lace—the cloth measures 74" X 114". The tablecloth will be raffled at the luncheon at "Old Towne Inn"; we would like to keep this beautiful tablecloth in the medical family so please donate to AMA-ERF.

A complimentary weekend at the Radisson Plaza Lexington for a two night stay (Friday and Saturday) along with a bottle of Champagne upon arrival will be given away by simply signing up at the Auxiliary's booth. The name of the lucky physician or spouse will be drawn at the close of the KMA Convention to allow time for all attending either the Fall Board or the Convention to sign up.

For further information on any of the above please contact Mrs. James Russell (Sue), Fall Board Chairman, 652 Tally Road, Lexington, Ky., 40502 or call (606) 266-0149.

Ellen C. Sklar (Mrs. Allen), President
Auxiliary to the Kentucky Medical Association

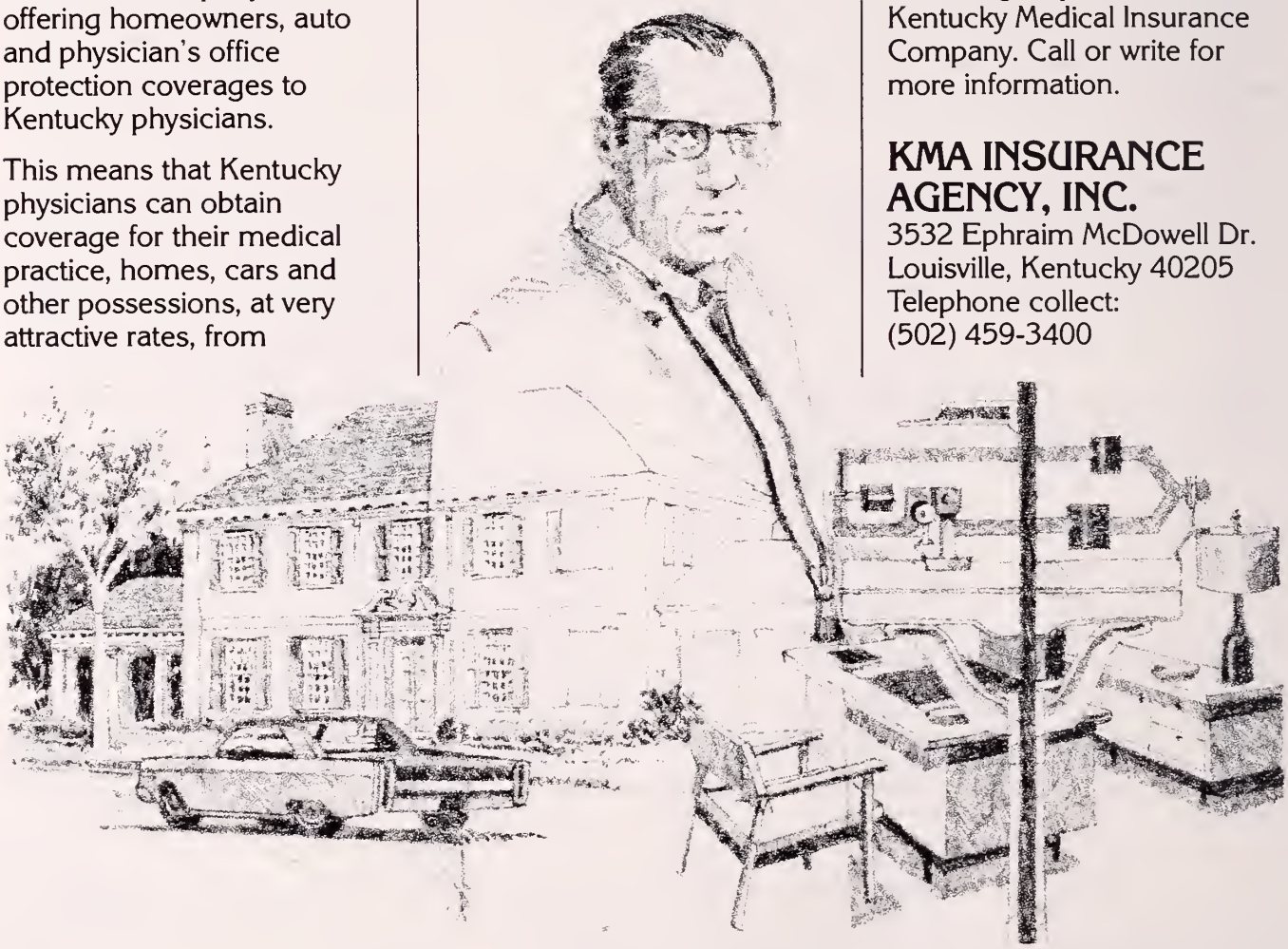
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Cataract Surgery-Focus

Gary R. Wallace, M.D.

Despite some evidence that aspirin therapy may retard cataract formation, cataracts continue to be one of the most common afflictions of mankind. In 1982, about 500,000 cataract extractions will be performed in the United States making it one of the most frequently performed operations.

Cataract surgical techniques and instrumentation have been in the vanguard of the technological explosion that has occurred in medicine during the past 15 years. Development of finer sutures and needles, operating microscopes and microscopic instruments, enzyme zonulysis, cryosurgical techniques and instrumentation, anterior vitrectomy techniques, phacoemulsification techniques, daily and extended wear soft contact lenses have changed and refined cataract surgery and post-operative visual correction to a high degree of sophistication.

The most controversial and the most significant advance in cataract surgery during this period has been intraocular lens implantation. Despite differences of opinion regarding type of lens (anterior chamber, posterior chamber, iris fixated) and type of surgery (intracapsular vs. extracapsular), it is clear that intraocular lens implantation is the procedure of choice in many patients. About half the cataract extractions in the United States this year will be performed with intraocular lens implantation.

Although there have been great improvements in the techniques of cataract surgery, the judgment of the surgeon and his or her assessment of the patient's visual needs continues to be an indispensable factor. It must also be remembered that equally superb results are achieved by surgeons using quite different techniques. No single technique has shown clear cut superiority. Therefore, each cataract surgeon faces the moral responsibility of evaluating each new development and incorporating it into his surgical technique if indicated.

What does the future hold for cataract surgery? The search will continue for the perfect intraocular lens implant and debate will continue between intracapsular and extracapsular extraction proponents. To date the laser has not been used in cataract surgery, but now there is some evidence that the Neodymium: YAG laser can be employed as the initial step in extracapsular surgery. Although this is an exciting possibility, this has not yet been proven to be universally feasible.

Another futuristic and mainly theoretical concept is phako-ersatz. Briefly stated, this procedure would aspirate the lens cortex and nucleus, through a scleral incision just posterior to the iris leaving the lens capsule intact. Another substance would then be injected into the lens capsule essentially reforming the lens. Theoretically, if the substance were chosen appropriately the rigidity of the senile crystaline lens could be reduced, thus restoring accomodative qualities to the lens and even reducing or eliminating the need for reading glasses or bifocals. Needless to say, the technical problems appear to be almost insurmountable, but considering the marvelous advances in cataract surgery as well as all phases of medicine in the past decade, one would be loath to say that it is impossible.

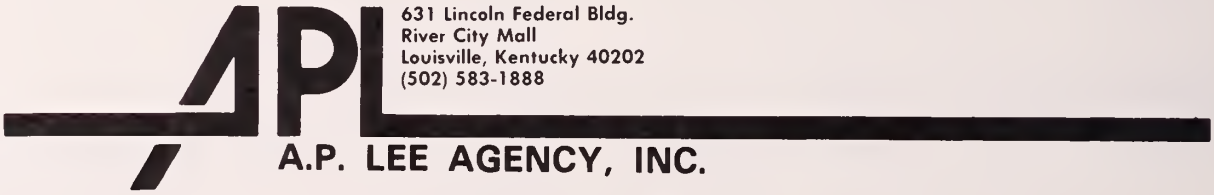
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Problems with Carbonless Copy Paper

The Occupational Safety and Health Administration of the U.S. Department of Labor has requested any information that might be available from the medical profession of this country to suggest an unusual incidence of health problems stemming from the use of carbonless copy paper. In Sweden there have been reports which suggest that persons working with carbonless copy papers have developed complaints of irritation of the eyes, mucous membranes or skin and there have been some allegations of an occupational relationship. No cases have been reported outside of Sweden. In particular, there have been no cases reported from this country. Patch tests, prick tests, positive eye provocation of inhalation tests with substances used in carbonless copy paper have never been reported.

Any physician who has noticed an unusual frequency of irritation of the eyes, mucous membranes or skin that seem to be associated with the use of carbonless copy paper should notify the Division of Scientific Policy, Richard J. Jones, M.D., Director of AMA Headquarters, 535 North Dearborn Street, Chicago, Illinois 60610.

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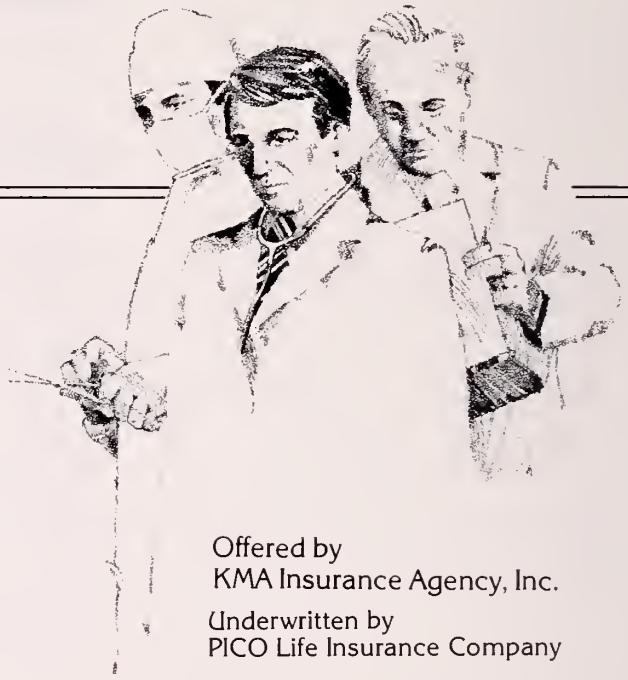
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RICHARD F. HENCH

Chairman of the Board

Achieving a consensus from any group of individuals is not an easy task. When those individuals are physicians, each with strong opinions, it is quite an achievement when policy is established that everyone can accept.

As Chairman of the Board of Trustees, Richard F. Hench, M.D., admits that reaching unanimity on the Board is one of his biggest challenges. He explains, "KMA represents several thousand physicians who may not be politically oriented, but have every opportunity to express their views. And as you know," Dr. Hench says with a smile, "physicians are not real reticent about expressing their views. They tend to deal with problems head on. This, I think, is one of the strengths of medicine."

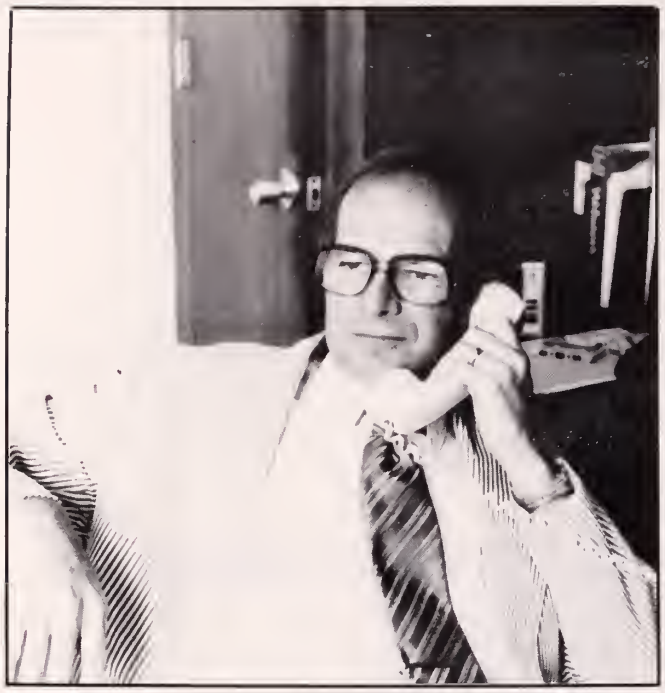
Doctor Hench's philosophy regarding his role as Chairman is to act as a catalyst. "Most of the problems we deal with have no single solution. The Chairman is there to preside, to keep the meeting moving and to help arrive at a reasonable judgment. In spite of the diverse opinions of the Board members at times, they work well together and compromise. The solutions may not make me happy, but as Chairman I have to keep my feelings out of it."

Doctor Hench has had the opportunity to express his views on KMA policies having served as Alternate KMA Trustee for the 10th District from 1974 to 1978 and 10th District Trustee since 1979. This experience with the Board has aided Doctor Hench in his role as Chairman.

Facing the issues confronting organized medicine may require Doctor Hench to use not only his experience, but a considerable amount of foresight. "One of the most obvious problems medicine has now is the cost of medical care. It's been discussed so much everyone is tired of hearing about it. But it is a very complex situation. One thing is certain, if there is to be any meaningful cost control that will preserve the quality of care, it will take a real commitment from physicians, " Doctor Hench stresses.

Complications occur when nonmedical professionals intervene in the name of cost control. "There may be some justification for the government to want to regulate cost, but they basically don't know how to monitor and assure quality along with it. It would be similar to me trying to pass judgment on corporate tax laws. I don't know anything about that subject. Government can't monitor and govern quality of care except by hiring physicians," Hench says.

Following the issue of health care cost, is another that will be confronting the KMA Board, Doctor Hench believes. "During the next few years, we are going to see a different atmosphere in the practice of medicine. In the past, there were usually a limited number of doctors, there was little or no advertising and almost no competition between private practitioners or among hospitals. With the increased number of physicians and the emphasis on cost of care, a competitive atmosphere is emerging. New health



care options are developing such as self-insurance offered by large corporations, and free-standing emergency care facilities. They aren't necessarily all bad as long as the quality of care and ethical practice are maintained."

KMA's role in these issues will be to try to reasonably oversee changes. Doctor Hench admits that the tendency to preserve the status quo is probably inherent with realistic actions in difficult situations. "I think organized medicine has become a more responsive, more positive force. I admit that KMA is a pretty conservative organization and it should be. There is no need to apologize for that."

The mechanisms to resolve these issues of cost control and competition have already been established in KMA. The Peer Review system encompassing the Judicial Committee and the Claims and Utilization Review Committee are just a few ways of insuring cost-control while preserving quality of care. In addition, other standing or ad hoc committees deal with specific concerns like free-standing clinics. "We're conservative, but not stagnant. Changes will always come and some are positive. Beneficial changes will evolve into 'status quo' and that's the point and purpose of our conservatism" Hench says.

Doctor Hench, an internist, has been practicing in Lexington for 18 years. He is from Pennsylvania and graduated from Temple University School of Medicine in 1956. While Doctor Hench was in the Air Force he met John E. Myers, Jr., M.D., of Lexington. After visiting Doctor Myers he was so impressed with Lexington that he decided to stay, and "I've never been sorry." Managing his time between a private practice, board meetings and family is very demanding, Doctor Hench admits. But he has probably had more than his share of experience from learning how to manage time from living with seven children that he and his wife, Barbara, share.

Doctor Hench has an easy smile and a good sense of humor which serve him well through stressful periods. "At one time we had six teenagers living at home. We learned something about survival during that time."

The Hench's now have three children working in Lexington; another who is a physician's assistant in Florida; a professional ball player for the Yankee organization; a graduate in engineering from Vanderbilt; a student at Georgia Tech majoring in computer sciences and one in high school.

PROFILE



Doctor Hench's hobby is playing golf, a pastime he shares with his wife. Mrs. Hench was once a secretary for the Fayette County Medical Society. Doctor Hench says, "I met Barbara at a committee meeting—the best thing that ever happened to me at a committee meeting." They have been married 11 years.

Dealing effectively with the problems facing organized medicine will demand action from KMA members. "KMA has the ability to find a solution. What is even more impressive and I think a real compliment is the fact that there are few complaints about the quality of medical care. No one ever comes to me and says, 'I'm getting lousy medical care.' Quality is such that it is taken for granted. But we must remember that it exists partly because of a united effort. We have to keep doing what we have been doing in the past to maintain that quality."

Text and photographs by Donna M. Young

BOOK REVIEWS

The Centenary of Friedrich Daniel von Recklinghausen

In 1882 at the age of 49 F. D. von Recklinghausen (1833-1910) published his most famous paper on "in den multiplen Neuromen" as a *festschrift* for Rudolph Virchow. In honor of this centenary date a volume has just been published (only the fourth ever in the English language and the first since 1956).* For the medical history buffs a translation of von Recklinghausen's original paper is published along with an additional biographical chapter.

The book contains input of about 40 authors documenting the remarkable progress that has been made and is being made in understanding "von Recklinghausen's disease." Actually, he has the honor (?) of having more than one disease named for him though the two may well be related to embryological defects in the neural crest and its projections, neurocristopathies. The great growth in knowledge comes from the increasing understanding of the ecogenetics of the neurocristopathies and the growth factors that influence their ontogeny. As our studies enter the second century many leads for future research now exist that could conceivably lead to the control of many neurocristopathies in our life time.

In honor of this centenary occasion a National Neurofibromatosis Foundation has been chartered. The NNF may well have the opportunity to spend its money effectively.

***Riccardi, V. M. and Mulvihill, J. J., Neurofibromatosis (von Recklinghausen Disease), Genetics, Cell Biology, and Biochemistry, Advances in Neurology, Volume 29, Raven Press, New York, 1981, pp 304**

John S. Spratt, M.D.

ASSOCIATION NEWS



CME credits were available to the physicians and nurses attending the presentations and hands-on workshops.

The Emergency Medical Care Seminar, sponsored by the KMA Emergency Medical Care Committee, was held June 8, 9, & 10 at the Executive West, Louisville. The 400 people attending were offered presentations and workshops on the themes of "Penetrating Trauma," "OB-GYN Emergencies," and "Summertime Trauma" as continuing education opportunities. Luncheon speakers on June 8 and 9 highlighted the activities. H. C. Bock, M.D., Indianapolis, discussed "Medical Support Indianapolis Motor Speedway" and George R. Nichols, II, M.D., talked on "Coal Mine Disasters."





Special guest speakers were invited to give luncheon presentations during the Seminar. H. C. Bock, M.D., (left) of Indianapolis was speaker on June 8 and George P. Nichols, II, M.D., Louisville, was guest on June 9.



Exhibitors displayed new medical equipment during intermissions of the EMCS.

The Department of Pediatrics, Univeristy of Louisville School of Medicine, is pleased to announce that the 16th Annual Newborn Symposium will be held on November 4, 5, 1982, in the Health Sciences Center Auditorium. The topic this year will be: INFECTIONS IN THE NEWBORN. Participants will be Saul Krugman, M.D., the Distinguished Louisville Pediatric Society Lecturer for 1982, Carol J. Baker, M.D., Hugh L. Moffet, M.D., Marc I. Rowe, M.D., John Sever, M.D., and members of the Department of Pediatrics. For further information, please contact: Billy F. Andrews, M.D., Professor and Chairman, Department of Pediatrics, University of Louisville School of Medicine, Louisville, KY 40292 (502) 588-5753

Members in the News

Van R. Jenkins, M.D., FACOG, Lexington, was elected Assistant Secretary for 1982-83 of the American College of Obstetrics and Gynecology. Doctor Jenkins is a practicing obstetrician/gynecologist with Physicians for Women in Lexington. He is also Clinical Professor of Obstetrics and Gynecology and Assistant Clinical Professor of Family Practice at the University of Kentucky College of Medicine. Doctor Jenkins is also currently Chairman of the KMA's Committee on Maternal Child Health, Executive Committee Chairman of the Kentucky Obstetrics and Gynecology Society and past Secretary of the AMA's Section Council on Obstetrics and Gynecology.

Max A. Crocker, M.D., Lexington, Professor of Family Practice, University of Kentucky College of Medicine, was installed as President of the Kentucky Chapter of the American Academy of Family Practice. Doctor Crocker is a Charter Fellow of the American Academy of Family Physicians and has formerly served as Chairman of the Scientific Assembly Committee and as Vice President. Doctor Crocker attended the University of Tennesee and is a Diplomate of the American Board of Family Practice.

Gradie R. Rowntree, M.D., Louisville, received the Honorary Degree of Doctor of Humanities from the University of Louisville during the Commencement Exercises last spring. Doctor Rowntree has worked in public health and preventive medicine and is currently Clinical Professor of Occupational Health in the Department of Community Health at the University of Louisville School of Medicine. Doctor Rowntree has served the university for 43 years.

Yosh Maruyama, M.D., of Lexington, has been selected for Fellowship in the American College of Radiology (ACR) in honor of his special contributions

to the medical profession. Doctor Maruyama, a specialist in radiation therapy, is a 1955 graduate of the University of California School of Medicine, San Francisco, and has been affiliated with the University of Kentucky since 1970. The ACR is the professional medical society representing 18,000 physicians who specialize in the use of radiation and ultrasound to diagnose and treat human disease.

Norman M. Cole, M.D., of Louisville, was elected Secretary of the American Society for Aesthetic Surgery. Doctor Cole earned his medical degree from Loma Linda Medical School, and had residency in plastic surgery at Duke University. He is a member of the Jefferson County Medical Society, KMA, AMA and the American Society of Plastic and Reconstructive Surgeons.

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IN MEMORIAM

NINA S. KATERYNIUK
1916-1982
Louisville

Nina S. Kateryniuk, M.D., died May 26. Doctor Kateryniuk was a 1949 graduate of the University of Louisville School of Medicine. She was a Clinical Associate Professor of Psychiatry at the University of Louisville School of Medicine, a fellow of the Psychosomatic Medical Society, and had been a member of KMA since 1964.

RICHARD RAYMOND SNOWDEN, M.D.
1887-1982
Ravenna

Richard Raymond Snowden, M.D., died June 5. Doctor Snowden was a 1912 graduate of the University of Louisville Medical Department. His specialty was in public health and he had been a member of KMA since 1952.

H. DAVIS CHIPPS
1909-1982
Lexington

H. Davis Chipps, M.D., died March 10. Doctor Chipps was a 1934 graduate of the University of Louisville School of Medicine. He was a pathologist and had been a member of KMA since 1954.

Postgraduate Opportunities

OCTOBER

1-2 6th Annual Bethesda Hospital Phacoemulsification, Extracapsular Cataract & Implant Seminar, The Terrace Hilton Hotel, 15 West 6th Street, Cincinnati, OH

1-2 Eleventh Annual Symposium, Post Graduate Course, "Quality of Life: Quality of Care," Western Division, American Geriatrics Society, Westin Bayshore Hotel, Vancouver, British Columbia

1 Thermography and Breast Screening, Marriott Twin Bridges Hotel, Arlington, VA. INFO: Paula Hobbins, Thermal Image Analysis, P.O. Box 5368, Madison, Wis., 53705

3 Cavitron Practical Phacoemulsification and Extracapsular Lab, Bethesda Hospital and Deaconess Association, The Terrace Hilton Hotel, Cincinnati, OH

4-7 American Academy of Family Physicians medical educational forum, Moscone Center, San Francisco, CA

4-7 *Advances in Hematology and Oncology:* New York, NY. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

5-8 *Present Concepts in Internal Medicine:* San Francisco, CA. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

6-9 Orthopaedic Medicine Symposium with James Cyriax, M.D., London, England, David H. Thurman, M.D., P.O. Box 4434, Louisville, 40204

7-9 *The Clinical Spectrum of Adult Heart Disease:* Albuquerque, NM. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

8 East Tennessee State University, Limb Regeneration, Johnson City, Tennessee

9-17 The Seventh Annual International Body Imaging Conference, Sheraton Royal Waikoloa Hotel, Kona, Hawaii

11-14 International Continuing Medical Education (CME) Meeting, Honolulu, Hawaii

11-14 Update '82: State of the Art, Science, and Profession, American Psychiatric Association, The Galt House, Louisville, KY

12-14 *Arthritis Update—1982 Diagnosis and Treatment; Usefulness of the Laboratory:* Pittsburgh, PA. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

13-16 *New and Changing Clinical Concerns of Internal Medicine:* Lexington, KY. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

14-15 Health Care of Louisville, "Challenges in Medical Ethics: 1982" Conference, Seelbach Hotel, Louisville

18-20 *Cardiovascular Therapeutics:* New York, NY. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

20-22 *Update in Nephrology:* Toronto, ON. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

21-23 *Pathogenesis and Treatment of Disorders of Hemostasis and Thrombosis: Philadelphia, PA. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.*

22-23 International Medical Education Corporation, Arrhythmias and Cardiac Ischemia: Diagnosis and Management, Stouffers Cincinnati, OH

22-23 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hyatt Lincolnwood, Chicago, IL

25-29 A Review of the Old & New in the Diagnosis & Therapy on Infectious Diseases: Houston, TX. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

26 UKMC, The Lexington Seminars in Medicine and Nephrology, "Hypercalcemia of Malignancy," Hyatt Regency Hotel, Lexington, KY

27-30 *Infectious Diseases—1982:* New York, NY. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

28-30 *How to Keep the Patient Alive—Critical Care 1982:* Atlantic City, NJ. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

29-30 Kidney Disease Update, Bethesda Hospital and Deaconess Association, 619 Oak Street, Cincinnati, OH

30-2 76th Annual Scientific Assembly, a conjoint meeting of the Southern Medical Association and the Medical Association of Georgia, Peachtree Plaza Hotel and Georgia World Congress Center, Atlanta. Contact: Southern Medical Association, PO Box 2446, Birmingham, AL 35201

NOVEMBER

3 Wayne State University School of Medicine, 22nd Annual Thyroid Workshop, Gordon H. Scott Hall of Basic Medical Sciences, Detroit, Michigan

2 Anorexia Nervosa: Causes and Cures, The Division of Adolescent Medicine, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY

4-6 *Recent Advances in the Diagnosis & Therapy of Common Endocrine Problems:* New Orleans, LA. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

5-6 International Medical Education Corporation, Cardiac Rehabilitation, Hyatt Lincolnwood, Chicago, IL

12-14 East Tennessee State University, Cardiology in the Aging, Johnson City, TN

13 "The Elderly Patient and the Hospital Experience", Bethesda Hospital & Deaconess Assoc., The Terrace Hilton Hotel, 15, West Sixth Street, Cincinnati, OH

16-17 East Tennessee State University, Ellis Orthopaedic Lectureship, Johnson City, TN

18-20 Wayne State University School of Medicine, Acute Injuries of the Hand, Primary and Definitive Care, The Westin Hotel, Renaissance Center, Detroit, Michigan

20 Wayne State University Schools of Medicine and Law, "Surrogate Mother Symposium, McGregor Memorial Conference Center, Detroit, MI

26-30 Wayne State University School of Medicine, Ophthalmology: Basic and Clinical Review, Hyatt Regency Dearborn, Dearborn, Michigan

DECEMBER

3-4 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hilton Plaza Center, Kansas City, MO

3-5 International Medical Education Corporation, Ambulatory Electrocardiography: Clinical Applications, Methodology & Interpretation, Hyatt Regency, Chicago, IL

JANUARY

East Tennessee State University, Forensic Medicine, Johnson City, TN

8-14 Steamboat Springs, Colorado, Current Concepts in Pain Management. INFO: D. Berman, M.D., Program Director Current Concept Seminars, 3301 Johnson Street, Hollywood, FL 33021

20-30 Winter Congress International Body Imaging Conference, St. Moritz, Switzerland

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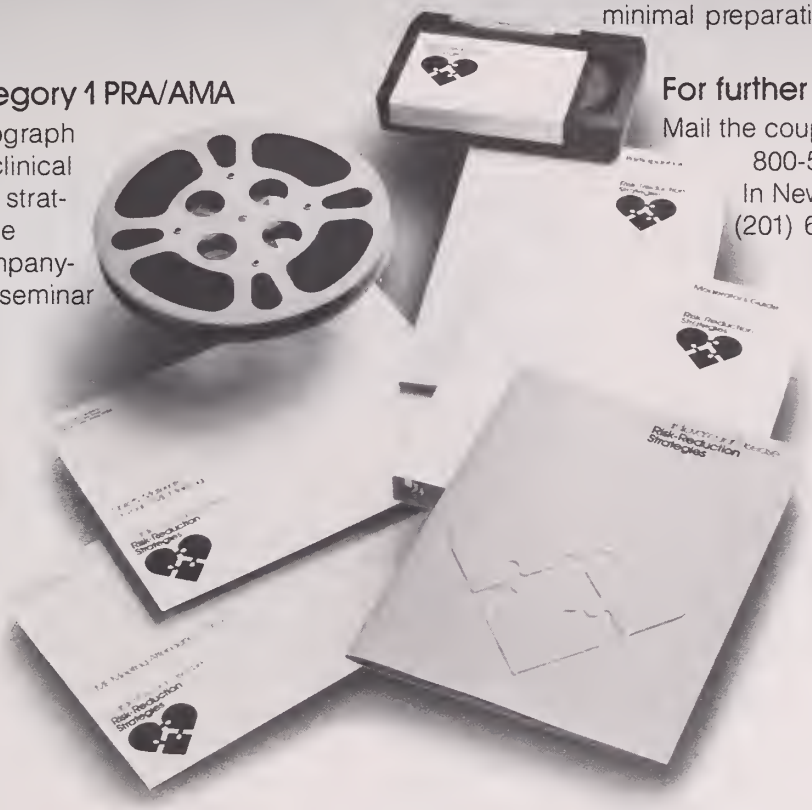
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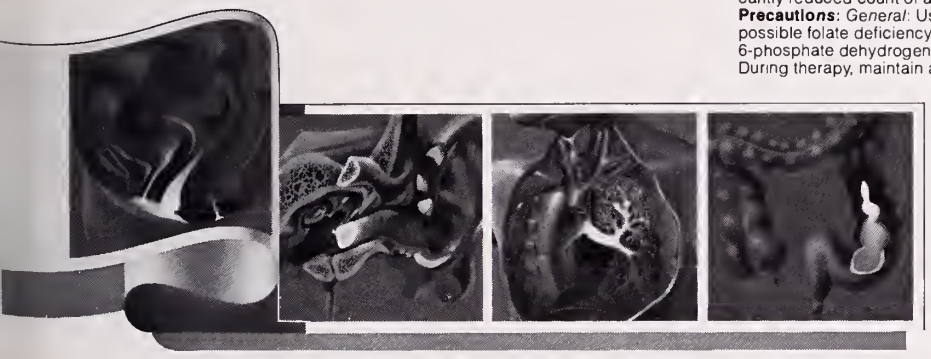
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BACTRIM™ (trimethoprim and sulfamethoxazole/Rocha)
Before prescribing, please consult complete product information, a summary of which follows:
Indications and Usage: For the treatment of urinary tract infections due to susceptible strains of the following organisms: *Escherichia coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris, Proteus morganii.* It is recommended that initial episodes of uncomplicated urinary tract infections be treated with a single effective antibacterial agent rather than the combination. *Note:* The increasing frequency of resistant organisms limits the usefulness of all antibacterials, especially in these urinary tract infections.
For acute otitis media in children due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over other antimicrobials. To date, there are limited data on the safety of repeated use of Bactrim in children under two years of age. Bactrim is not indicated for prophylactic or prolonged administration in otitis media at any age.
For acute exacerbations of chronic bronchitis in adults due to susceptible strains of *Haemophilus influenzae* or *Streptococcus pneumoniae* when in physician's judgment it offers an advantage over a single antimicrobial agent.
For enteritis due to susceptible strains of *Shigella flexneri* and *Shigella sonnei* when antibacterial therapy is indicated.
Also for the treatment of documented *Pneumocystis carinii* pneumonitis.
Contraindications: Hypersensitivity to trimethoprim or sulfonamides; patients with documented megaloblastic anemia due to folate deficiency; pregnancy at term; nursing mothers because sulfonamides are excreted in human milk and may cause kernicterus; infants less than 2 months of age.
Warnings: BACTRIM SHOULD NOT BE USED TO TREAT STREPTOCOCCAL PHARYNGITIS. Clinical studies show that patients with group A β-hemolytic streptococcal tonsillopharyngitis have higher incidence of bacteriologic failure when treated with Bactrim than do those treated with penicillin. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted.
Precautions: *General:* Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function. Bactrim may prolong prothrombin time in those receiving warfarin; reassess coagulation time when administering Bactrim to these patients.
Pregnancy: Teratogenic Effects: Pregnancy Category C. Because trimethoprim and sulfamethoxazole may interfere with folic acid metabolism, use during pregnancy only if potential benefits justify the potential risk to the fetus.
Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea, pseudomembranous colitis and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.
Dosage: Not recommended for infants less than two months of age.
URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:
Adults: Usual adult dosage for urinary tract infections—1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days. Use identical daily dosage for 5 days for shigellosis.
Children: Recommended dosage for children with urinary tract infections or acute otitis media—8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses for 10 days. Use identical daily dosage for 5 days for shigellosis.
For patients with renal impairment. Use recommended dosage regimen when creatinine clearance is above 30 ml/min. If creatinine clearance is between 15 and 30 ml/min, use one-half the usual regimen. Bactrim is not recommended if creatinine clearance is below 15 ml/min.
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1. Rubin RH, Swartz MN: *N Engl J Med* 303:426-432, Aug 21, 1980. 2. Data on file, Medical Department, Hoffmann-La Roche Inc.

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October 1982
Volume 80
Number 10

NDS



Dwight L. Blackburn, M.D.
KMA PRESIDENT
1982-83

The Journal Of The Kentucky Medical Association

OCT 2 1982

Pinworms work the night shift



Artist's interpretation:
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Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

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Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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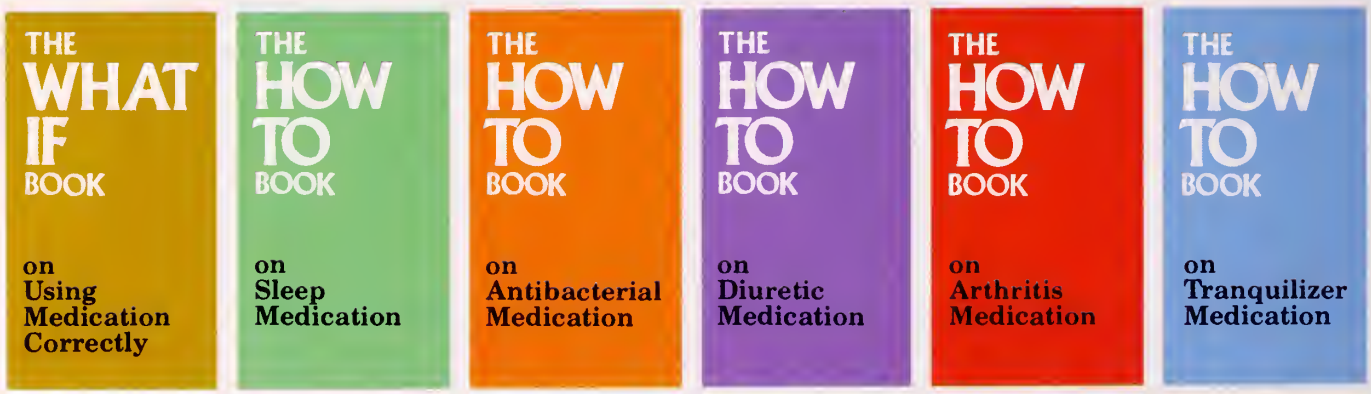
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PRESIDENT'S PAGE



I am honored by the trust and confidence you have placed in me by allowing me to serve as President of KMA for the coming year. Each year we renew our pledge to the profession and to our patients that this Association stands ready to defend and protect the precious freedoms we enjoy. Let me assure you that KMA will continue that quest and offers its assistance to the public, private and governmental sector in achieving high quality medical care at the lowest possible price. An important part of our general program is the renewal of relationships with our friends in the health care industry. While we occasionally have divergent views, there has always been unanimity when the very system is threatened.

We face unprecedented challenges over the next two years which may determine the future course of health delivery. The rising cost of medical care may serve as the "strawman" to remove the individual choices patients, providers and payors presently enjoy. Now, more than ever, the health care industry must recognize the threat for what it really is and prepare to meet the challenge. To that end, I pledge my cooperation in strengthening and supporting the health care coalition so that we are in the position of assuming our rightful place in any effort to redesign, reduce or otherwise alter the health delivery system.

Pointing the finger at providers and private third party payors has become the order of the day by those forces who seek control of the health care industry. In the past we have remained rather aloof and reacted only occasionally, rarely defending ourselves in the public forum. The dramatic advances achieved by the American health system are envied and revered throughout the world and we have no need to apologize for our accomplishments and contributions to our fellow citizens.

We have objected very strongly to the recent appointment of a commission to study the cost of health care. The commission, which excludes health care providers and members of the Kentucky General Assembly further reduces the opportunity to resolve the problem. We again call on the Governor to reconsider his decision and restore some semblance of credibility to its deliberations. Polarization between those who pay the bill and those who provide the services creates an adversarial climate which serves no useful purpose. We stand ready to work with Governor Brown and other groups in reaching an equitable solution to the dilemma we face.

Thank you for the opportunity to serve, and I look forward to working with you this coming year.

Dwight L. Blackburn, M.D.
KMA President



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SCIENTIFIC

Multiple Primary Bronchogenic Carcinomas

PORTER MAYO, M.D. and SIBU P. SAHA, M.D.

Multiple primary lung tumors though uncommon are being recognized with greater frequency than previously noted. Once it is decided that the second lesion is a new primary neoplasm, surgical resection is possible if confined to the lung and the patient's physical condition permits. Patients who survive resection of a primary bronchogenic carcinoma must be regularly examined radiologically for the rest of their lives.

THE probability of developing a second primary lung cancer in a patient who has had successful removal of one pulmonary malignancy is rare though presently recognized with greater frequency.[1,2,3,4] Merrick reports only five of more than 5,000 patients with bronchogenic carcinoma developed a second primary lung cancer.[5] Rohwedder and Weatherbee in a later review of the literature recorded 155 patients having multiple bronchogenic carcinoma and found development of ipsilateral carcinoma occurring at different times were least common (4.5%).[6] Shields reports that data from the Veteran's Administration Surgical Adjunvant Group indicate that most of the second primary lung cancers are evident after the fifth year. Five hundred and thirty-five five-year survivors were reported and a second primary lung tumor was noted in 41 patients. In 10 of the 41 patients, the second lesion was noted before the end of the fifth year and in the remaining 31 patients, after the fifth year. Shields further reports that once the decision has been made that the second lesion represents a new primary neoplasm, surgical excision should be performed if the lesion is confined to the lung and if the patient's general condition permits operative consideration.[3]

We present three cases of metachronous second primary neoplasms.

Case Report #1: This 58-year-old white man was initially examined in September 1973, complaining of left lower chest pain, productive cough and intermittent low-grade fever. He had smoked one and one-half to two packages of cigarettes per day for 40 years. Chest x-ray showed a large cavitating lesion with a fluid level measuring 4 cms. in diameter in the left lower lobe. (Fig. 1) Class V sputum cytology was reported. Left lower lobe resection was performed and reported as squamous cell carcinoma with

Presented, at the Kentucky Thoracic Society, 1981, Scientific Conference on Pulmonary Disease, Sept. 11, 1981, Lexington, Kentucky.



Fig. 1: Chest roentgenogram showing excavating carcinoma of the left lower lobe.

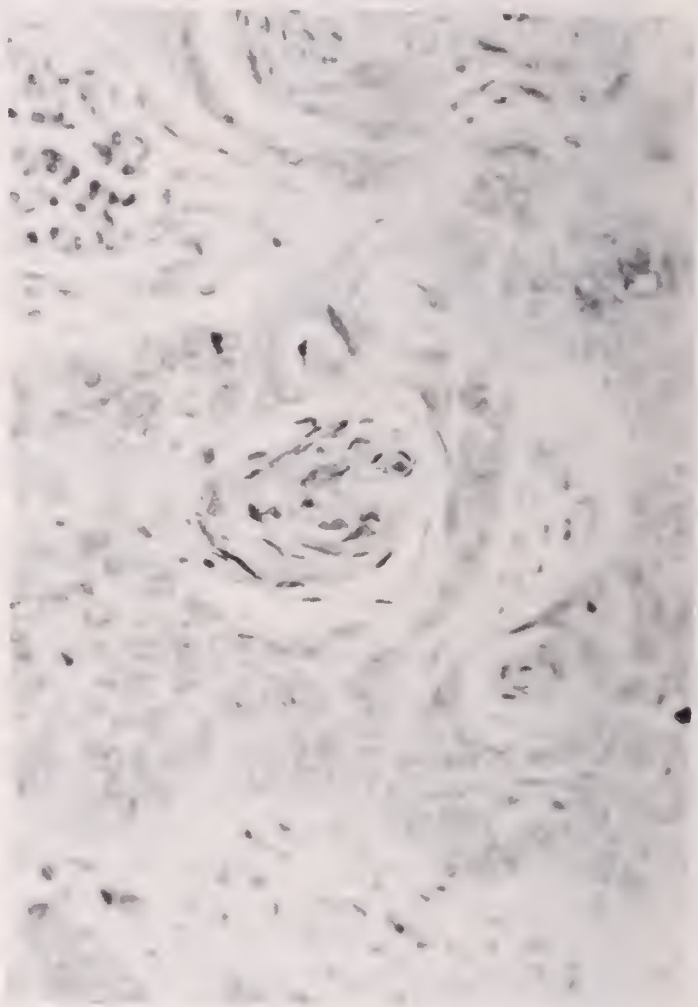


Fig. 2: Photomicrograph showing squamaous cell carcinoma.

no involvement of adjacent tissues or mediastinal lymph nodes. (Fig. 2)

Annual physical examination and chest radiograms through 1978 showed no evidence of recurrent carcinoma. (Fig. 3) Contrary to repeated warnings, he continued to smoke.

In September 1979, chest x-ray showed a large excavating tumor affecting the upper lobe of the left lung similar in appearance to the neoplasm previously resected from the left lower lobe. (Fig. 4) Wheezing was the single symptom. Bronchial secretions were reported as Class IV. There was no evidence of extra-pulmonary disease. Surgical resection of the left upper lobe was performed, including hilar nodes. Histopathology examination showed a poorly differentiated squamous cell carcinoma with metastasis to one of the five hilar lymph nodes. (Fig. 5) Radiation therapy was given and the patient survived nine months following the second lung resection. Our last evaluation included physical examination, chest radiographs, normal total body bone and liver scans. There was no indication of metastatic cancer.

Case Report #2: Our initial examination of this 65-year-old farmer was February 1977. His history, of two months' duration, included chills, fever, productive cough and weight loss. Chest x-ray showed a cavitary lesion measuring 7.5 x 8.5 cms. in the lower lobe of the right lung. (Fig. 6) Class V cytology was obtained by brush biopsy and subsequently the lower lobe was resected. There was no involvement of the peribronchial lymph nodes nor extension to the mediatinum or other evidence of metastatic disease. The cell type was squamous carcinoma. (Fig. 7) This patient was examined regularly during the next year showing no recurrence of cancer. This patient stopped smoking immediately after the diagnosis of his first lung cancer. However, in the



Fig. 3: Chest roentgenogram five years later showed no recurrent carcinoma.



Fig. 4: Chest roentgenogram six years following left lower lobe resection shows tumor of similar appearance in left upper lobe.

late fall of 1978, chest x-ray showed a small peripheral lesion in the left upper lobe. (Fig. 8) The solitary pulmonary neoplasm was removed by left thoracotomy and segmentectomy. The lesion proved to be a large cell carcinoma. The pathologist reported the two neoplasms to be separate primary bronchogenic carcinomas. (Fig. 9) His last evaluation showed normal total body bone, liver and brain scans. There was no evidence of metastatic disease. The patient died in May 1979.

Case Report #3: This 48-year-old man was initially examined in March 1963, having minimal respiratory symptoms, however, chest x-ray showed a tumor in the right upper lobe. Surgical resection was recommended and total pneumonectomy performed due to the extension of the lesion across the border of the upper lobe involving both lower and middle lobes. This patient was examined yearly through 1978 showing no evidence of recurrent tumor or pulmonary disease. The patient stopped smoking cigarettes immediately after his thoracotomy, 1963, but later "occasionally smoked a pipe." In September, 1979, the patient first noted shortness of breath and was examined in October at which time pneumonitis and possible neoplasm was noted in the hilum of the left lung. Sputum and cytology studies were Class I and Class II. The pneumonitis cleared; however, the neoplasm persisted. Surgical consideration was not given due to (1) the anatomical position of the lesion in the left hilum and (2) the patient's extremely poor cardiovascular condition. If the neoplasm in the left lung had been small and peripheral, resection would have been feasible even though the patient had undergone a contralateral pneumonectomy. He received radiation therapy,

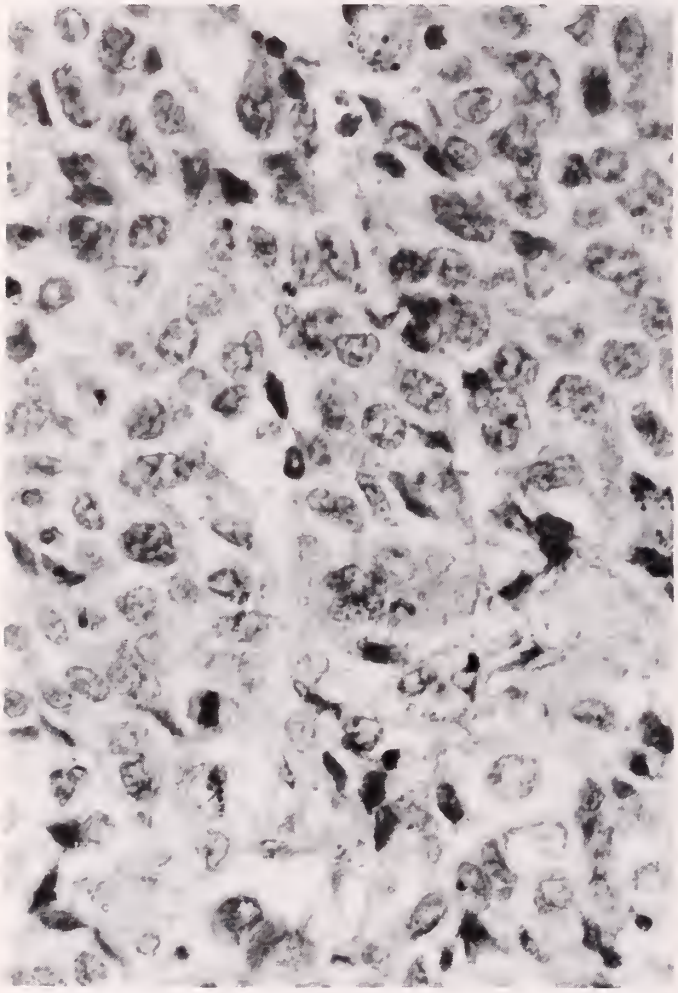


Fig. 5: Photomicrograph shows poorly differentiated squamous cell carcinoma.



Fig. 6: Chest roentgenogram showing cavitating carcinoma in lower lobe, right lung.

however, failed to respond and died in February 1981. Although the second primary lesion was not established by cell type, the 16 year interval and lack of metastatic disease during that period sufficiently confirms a second new neoplasm.

Each of the patients died at his respective home. There were no autopsies.

Comment

Rohwedder has reported that "in several large series the incidence of multiple primary lung cancers ranges from 0.2 to 1.8% These figures are not strikingly different form the 2.0 to 4.0% of multiple cancers found in other organs. Epidermoid carcinomas predominated, representing 57% of all multiple tumors and 87% of multiple neoplasms having identical histology."[6]

Dellon, in his series of 42 multiple primary neoplasms, includes three of the lung; two of the three patients having squamous cell carcinoma as first and second primary cell type with intervals of one year and five years respectively.[7] Fifteen cases of multiple primary cancer of the lung have been recorded by Merrick.[5] Four cases revealed histologically different tumors occurring five to 12 years apart; in two cases, two different cell types were found existing concomitantly, while nine patients had metachronous tumors of the same cell type. In order to qualify these tumors as second tumors, Merrick arbitrarily chose a five year interval.

Generally, the accepted evidence for the existence of multiple primary tumors can be exhibited by two or more different cell types, be they synchronous or metachronous. However, McGrath has found that two to five different cell types can be arranged implying "initial in-

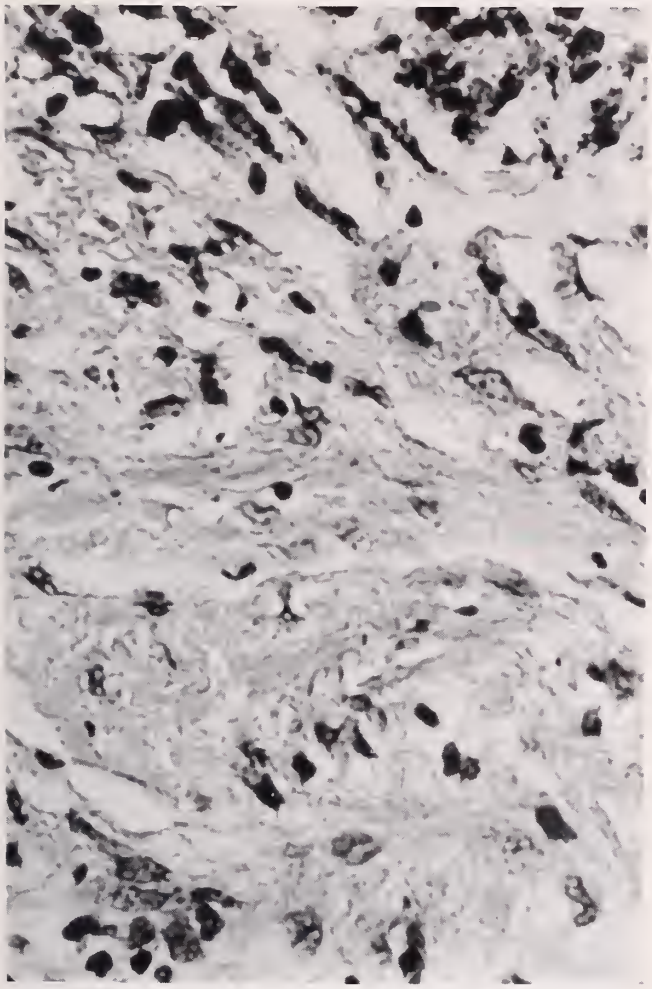


Fig. 7: Photomicrograph showing squamous cell carcinoma.



Fig. 8: Chest roentogenogram showing a small nodular neoplasm in the upper lobe, left lung.

dependence and ultimate fusion on neighboring neoplasms."[2]

Warren and Gates used the following criteria to distinguish multiple primary malignant tumors: (1) a definite malignant growth must be present, (2) each tumor must be distinct and (3) one malignancy must not be a metastasis of the other.[8] Salerno chose a less rigid criteria by defining the second primary malignancy in such a way as to indicate that the first lung cancer was treated by curative resection and that there was no clinical evidence of metastasis and further that the development of a second tumor occurred not adjacent to the first tumor.[4] Auerbach *et al* directly "related the histologic changes from basal cell hyperplasia through carcinoma in situ to the extent of the patient's cigarette intake,"[1] while Spratt and Hoag relate multiple primary malignant lesions to aging.[9] Finally," . . . there is an inherent susceptibility to cancer not possessed by all people, a conclusion abundantly corroborated by many other lines of evidence."[10]

Salerno reports a collected series from the literature plus six of his patients having a second primary bronchogenic carcinoma and states that survival rate after one year of resection of the second tumor to be 70% and two and three years later 55% and 27% respectively. Presently, it is recommended that the patients who develop second primary carcinomas of the lung should have surgical resection tailored to preserve respiratory function and that such procedures are compatible with low operative mortality and in some instances long-term survival.[4]

Because of the predicted increase in the occurrrence of second primary lung cancer a greater awareness of such a possibility must be

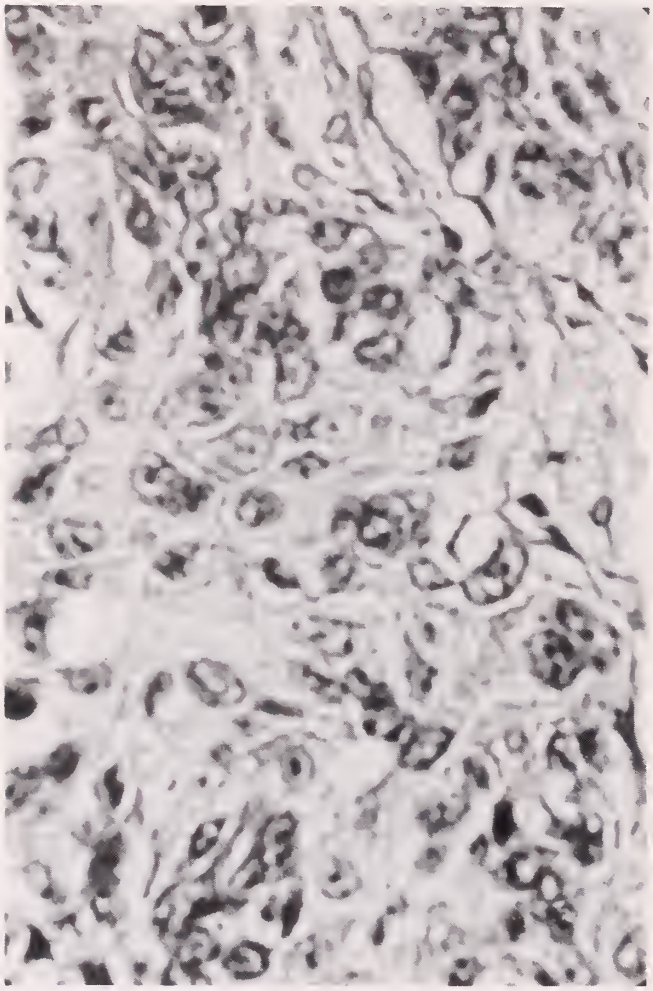


Fig. 9: Photomicrograph showing large cell carcinoma.

entertained with regular and continued post-resection exams, including roentgenograms; secondly, increasing emphasis—when feasible—on limiting surgical resection, to lobectomy or segmentectomy to preserve respiratory function.[11]

Acknowledgment

We wish to acknowledge the contribution of Camille M. Jernigan, Medical Research Journalist, Mayo, Long & Saha, P.S.C.

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Thoracic Empyema

NORMAN SNOW, M.D., AARON LUCAS, M.D. AND LAMAN A. GRAY, JR., M.D.

Pleural empyema continues to complicate the management of a variety of medical and surgical disorders. Our five-year retrospective review confirms that bronchopulmonary infection accounts for 50% of patients with empyema; trauma 19%; esophageal disruption 10% and pulmonary resection 10%. Patients most often presented with fever, chest pain, shortness of breath and signs of systemic malaise. Data on our 78 patients indicates that tube thoracostomy is effective in resolving exudative empyema but was the definitive therapy in only 35% of patients with a 92% success rate. It is rarely necessary to perform rib resection for open drainage (12%). Loculation of the pleural space frequently occurs and necessitates early decortication. Forty-two per cent of cases had decortication with a 94% success rate. The importance of timely decortication in resolving pleural sepsis cannot be over-emphasized. A graded approach based on an understanding of the pathophysiology of pleural infection is successful when properly applied.

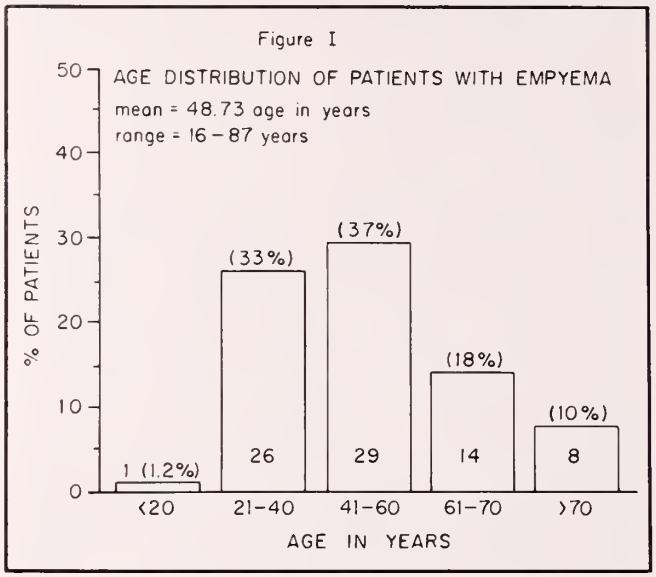
THORACIC empyema continues to be a challenge to the thoracic surgeon despite advances in antibiotic usage and surgical techniques.[8] In order to evaluate our effectiveness in dealing with this disease, we retrospectively analyzed our experience with particular attention to clinical presentation, etiology, bacteriology, treatment and outcome.

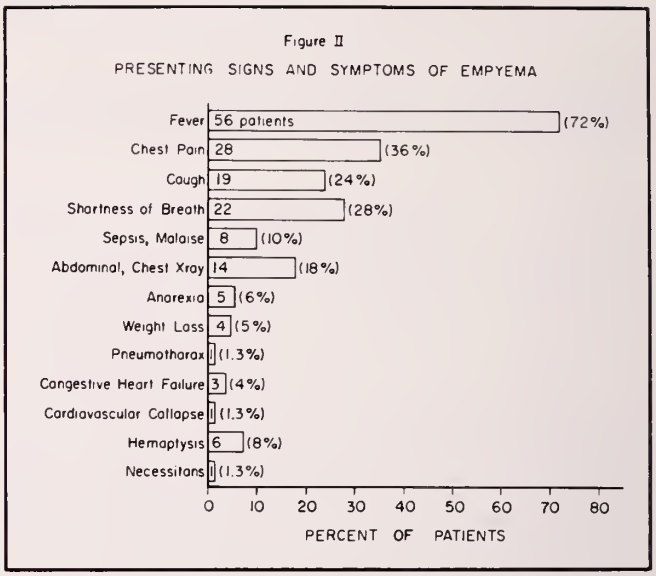
Clinical Material

Seventy-eight patients were treated for thoracic empyema at the University of Louisville Hospital and the Louisville Veterans Administration Hospital from January 1, 1974 through December 31, 1978. There were 59 males and 19 females. Fifty-one patients were white and 27 were black. Their ages ranged from 16 to 87 with a mean of 48.7 years (Figure I). Figure II depicts the clinical presentation of the patients. Fever (temperature greater than 100° F), chest pain, cough and dyspnea were most frequently encountered. Fourteen patients who were already hospitalized on the medical or surgical services had only an abnormal chest or abdominal radiograph to suggest the presence of an empyema. A significant number of patients experienced considerable delay in presentation despite the striking symptomatology observed. Of the 43 patients whose duration of illness could be accurately estimated, 24 (56%) delayed more than one week before seeking medical attention.

The most common predisposing factor in the development of thoracic empyema was antecedent bronchopulmonary infection, which was present in 50% of the cases. (Figure III) Post-resectional empyema, complications of esophageal surgery, and trauma accounted for another 37%. Four of the post-resectional empyemas followed pneumonectomy, two followed lobectomy and one followed a superior segmentectomy for lung abscess. Three of the post-traumatic infections were secondary to transthoracic gunshot wounds, four were sequelae of blunt chest trauma and three involved thoraco-abdominal gunshot wounds which traversed bowel, diaphragm and pleura. The patient classified as having signs of systemic sepsis was a heroin abuser. Surgical procedures on the esophagus resulted in empyema when anastomoses or suture lines leaked into the chest or from instrumental perforation. These operations included antireflux procedures, myotomy, dil-

From the Division of Thoracic Surgery, Department of Surgery, University of Louisville, Louisville, Kentucky 40202





atation and esophagectomy. Pleural sepsis followed pulmonary embolism in two patients and repeated thoracentesis of pleural effusions from congestive heart failure led to two additional cases. Transdiaphragmatic extension of a subphrenic abscess caused one empyema.

Tables Ia and Ib demonstrate the bacteriology of the empyemas. The list of causative organisms is extensive. Some patients harbored more than one pathogen. The organisms cultured varied with the etiology of the infection. Seventeen of the patients with pneumonia (44%) grew gram positive bacteria which reflects the community acquired infections seen in these patients. The majority of patients with post-resectional empyemas grew gram negative organisms and these were all hospital-acquired infections. Esophageal complications resulted in a variety of organisms being discovered.

Treatment and Results

All patients had some form of drainage of the pleural space. Table III illustrates the various treatment options and the subsequent outcome not only in terms of overall patient survival, but also in terms of empyema control.

Five patients were treated by thoracentesis alone and only one survived. The four deaths were caused by associated disease states which precluded further treatment of the empyema. The pleural infection was controlled in all but one patient but the illnesses were so short that meaningful information may not be available in this group. These patients died from variceal hemorrhage, septic shock, head trauma and metastatic carcinoma.

Tube thoracostomy provided definitive pleural drainage in 27 patients. Twenty patients survived (74%) while seven died. Five of the seven deaths were caused by concomitant disease states in patients whose pleural sepsis was controlled. However, two patients died of persistent pleural infection and are considered treatment failures.

Rib resection and open drainage was necessary in nine patients. Seven of the nine survived but both patients who died suffered septic deaths. One had the empyema under control and one did not. Therefore, there was one treatment failure among nine rib resections.

Thirty-three patients underwent open thoracotomy, evacuation of intrapleural debris, decortication and replacement of drainage tubes. Thoracotomy was required in all instances because of clinical failure, incomplete drainage or persistent pleural loculation despite treatment with intercostal catheters. Twenty-seven patients (82%) survived while six died. Two of the six died with persistent pleural sepsis as a major contributing factor to their demise and these patients clearly represented treatment failures (6%). The remainder died because of head trauma, cardiac failure, and overwhelming sepsis despite empyema control. One of the deaths

Table Ia
BACTERIOLOGY OF EMPYEMA

Gram positive organisms	29
Gram negative organisms	19
Anaerobic organisms	8
Mixed flora	8
No growth	9
Unknown	5

Table Ib
BACTERIOLOGY OF EMPYEMA
(number of isolates)

B-Strep.	13	Bacteroides	4
Staph Aureus	10	Hemophilus	4
Pseudomonas	10	Enterobacter	3
Anaerobes	9	Staph Epid.	2
Klebsiella	7	Enterococcus	2
Pneumococcus	7	Serratia	1
E. Coli.	6	Clostridia	1
Proteus	5	Diptheroids	1
Candida	1		
Unknown	3		

Table II
BACTERIOLOGY OF EMPYEMA BY ETIOLOGY

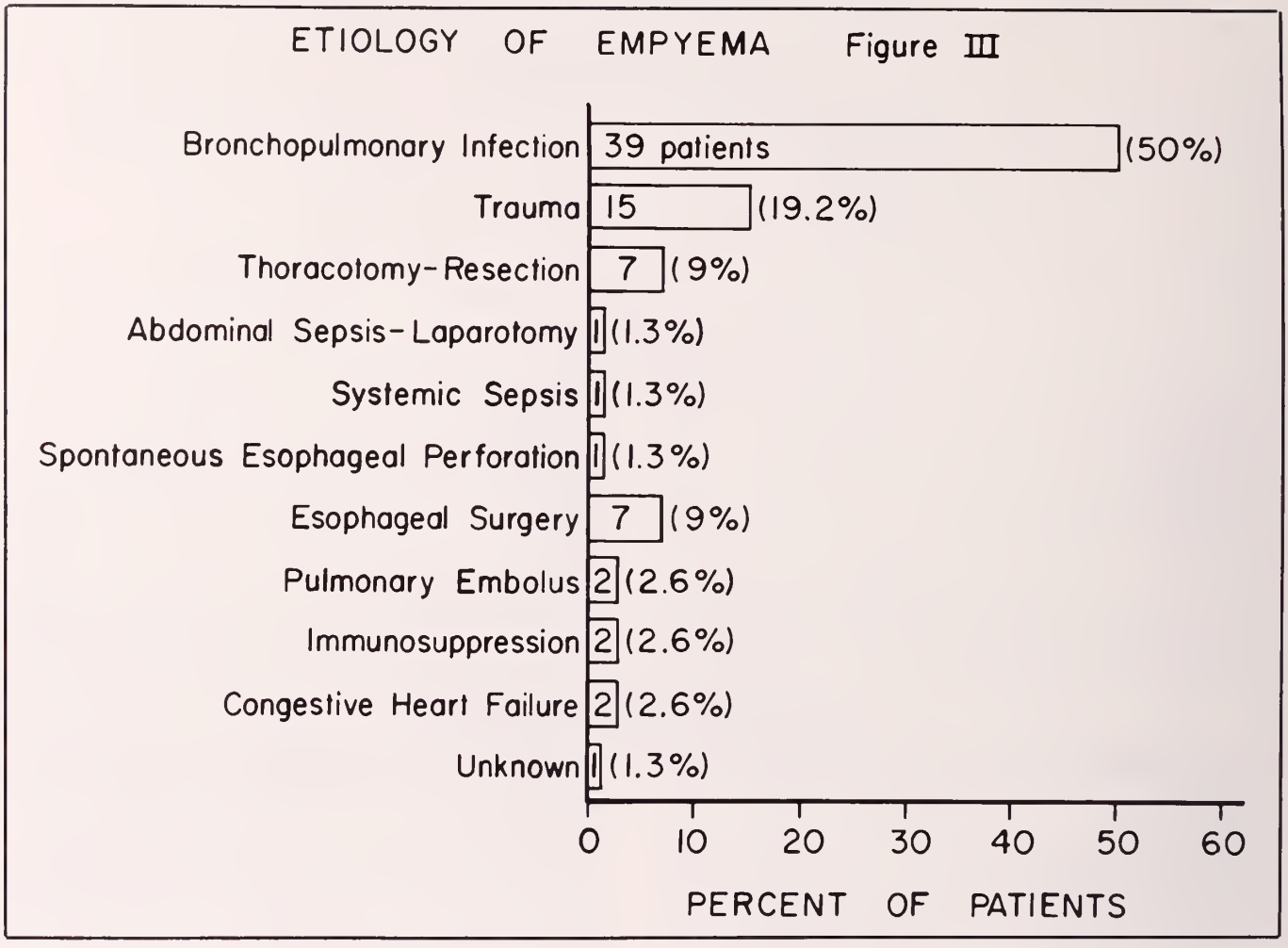
Etiology	Gram ⊕	Gram ○	Anaerobic	Mixed
Pneumonia	17	7	4	5
Thoracotomy	0	5	0	1
Esoph. Pathology	4	3	1	0
Abdominal Sepsis	1	2	0	0
Penetrating Chest Trauma	2	1	2	0
Blunt Chest Trauma	2	1	1	1
Immunosuppression	2	0	0	0
Sepsis	1	1	0	0
Pulmonary Embolus	1	0	0	1

Table III
DEFINITIVE THERAPY OF EMPYEMA

	# of Patients	% of Series	Survivors %	Mortality (%)	Successful Control	Empyema (%)
Non operative	0	—	— ——	- ——	——	——
Thoracentesis	5	6	1 20%	4 80%	5/5	100%
Chest tube	27	35	20 74%	7 26%	25/27	92%
Rib resection	9	12	7 78%	2 22%	8/9	88%
Decortication	33	42	27 82%	6 18%	31/33	94%
Thoracoplasty	1	1.3	1 100%	- ——	——	100%
Other	3	4	2 66%	1 33%	2/3	66%

Table IV
CAUSES OF DEATH BY ETIOLOGY

	Head Trauma	G. I. Bleeding	Gen. Sepsis	Pleural Sepsis	Stroke	Cardiac Death	Terminal Cancer	Total
Pneumonia	1	2	3	1	1	2		10
Thoracotomy				1		1	1	3
Pulmonary Embolus				1				1
Esoph. Pathology				2				2
Trauma				2				2
Immunosuppression			1				1	2



due to treatment failure occurred due to a technical error resulting in tube erosion of the aorta and exsanguination. A second patient expired from multiple organ failure after decortication; in retrospect, we felt that open drainage was not performed early enough in his illness to reverse the septic process. Therefore, one patient died as a direct consequence of decortication and one because of inappropirate timing of the procedure. There were four instances of prolonged airleak (five days or more) and four minor wound complications following decortication. Three patients required additional tube thoracostomy for control of the pleural space. No patient underwent open thoracotomy for simple post-traumatic hemothorax in this series.

The single patient who had a thoracoplasty for persistent empyema survived. One patient died after esophageal diversion and drainage following a leaking Nissen fundoplication, while one patient survived after diversion for an iatrogenic perforation of the esophagus. The patient who required pneumonectomy for persistent bronchopleural fistula also survived.

Comment

Empyema is usually a secondary process.[3,5,6,10,15,18,22] Fifty per cent of the patients in this series had bronchopulmonary infection as the predisposing cause. The portal of entry into the pleura may be by direct extension at the pleural surface, lymphatic contamination, hematogenous spread or necrotizing pneumonia.[19] The decline in the incidence of empyema is usually attributed to our ability to control these primary bronchopulmonary infections with antibiotics and endoscopic drainage.[8,10,19] The long delay in seeking medical treatment by the patients in this series may account for the large percentage of peripneumonic empyemas, since

the underlying infections remained untreated during this interval. Empyemas secondary to bronchopulmonary infections were most likely to be caused by gram positive organisms which is a reflection of the community acquired nature of these infections. The survival of only 74% of the patients in this group is surprising, but the patients were older than the group as a whole (62.2 years) and many had other debilitating diseases. Only one of the deaths in this group of patients was due to the pleural sepsis itself. (Table IV)

Post-resectional empyema has been a particularly virulent form of the disease. All but one of our patients had a concomitant bronchopleural fistula as the source of contamination which is a finding others have frequently noted.[20] These hospital-acquired infections were usually caused by gram negative enteric organisms. (Table II) The mortality rate from post-resectional empyema has been high, ranging from 22% to 55%.[2,3,20,22] Three, or 37%, or our patients died. Treatment must be directed at rapid evacuation of purulent debris and complete re-expansion of the underlying lung if it remains. Closed tube thoracostomy and rib resection effectively controlled the empyema in four of seven instances. Two of the remaining three patients died with the empyema as a proximate cause of death because of incomplete pleural evacuation.

Nine of our patients sustained pleural infection secondary to esophageal leakage which was either postoperative or post-traumatic in nature. A wide variety of organisms was cultured and the bacteriology bore no relationship to the nature of the injury or the level of esophageal leak. Tube drainage was successful in three patients while four patients required thoracotomy for control of the infection. Two patients died of unrelenting sepsis despite timely diversion and drainage.

Blunt and penetrating trauma, occurring alone or associated with multiple other injuries, accounted for 15 patients or 19% of the series. There was no clear bacteriological trend in the trauma patients. Only two of the trauma cases were successfully managed by closed drainage alone; ten patients required decortication with nine successes. The nature of the intrapleural infection and hemothorax following blunt or penetrating chest trauma seems to predispose the victim to loculation, consolidation of pleural fluid, and the formation of a thick pleural peel which are not easily drained by closed methods.[1] Our data would indicate that most patients who develop intrapleural infection following chest trauma will require thoracotomy and decortication.

The two patients who were immunosuppressed by chemotherapy or radiotherapy for cancer sustained gram positive empyemas. Both died but one succumbed to his terminal carcinoma with the empyema controlled. In the other man, multiple attempts at closed drainage led to sepsis, disseminated intravascular coagulopathy and death. Immunosuppressed patients do not localize intrapleural infection well. Others have noted that immunodeficient patients do poorly when treated with lesser procedures and have stated that the most "conservative" course to follow may be aggressive surgical drainage.[6,7] Our small experience seems to support this protocol since open drainage offers an excellent opportunity to evacuate the pleural debris and allow the lung to fill the pleural space completely.

Septic complications of pulmonary infarction carry a grave prognosis.[11,12,21,22] One of our patients sustained a pulmonary embolus which progressed to pneumonia, lung abscess, empyema and death despite tube drainage. A second patient sustained an empyema after a septic infarction related to drug abuse. Open decortication was necessary after closed methods failed to resolve the pleural infection. It has been previously suggested that early surgical management of infectious complications incurred as a result of pulmonary infarction is the most productive approach since intensive medical treatment and routine drainage procedures have not been generally successful.[11,12,21]

Conclusions

The successful treatment of pleural empyema involves a graded approach based on a thorough understanding of the pathophysiology of the disease. Advances in our understanding of empyema began with Graham's Empyema Commission report in 1918[9] and with Burford and Samson's experience during World War II.[16] In

the exudative phase, the pleura may be evacuated and the lung re-expanded by thoracentesis or tube thoracostomy. However, 47% of the patients in this series required open procedures for control of intrapleural infection. Once multiple pleural loculations have occurred, simple tube drainage will not suffice. Delay in affecting adequate drainage of the pleura has adversely affected the outcome in several patients, and has led us to adopt a more aggressive approach to the disease. Recognition of the failure of closed methods to deal with the pleural sepsis should not require a long time; clinical and radiological evidence has, in our experience, become available within three to five days after tube thoracostomy or thoracentesis. Failure to relieve fever, leukocytosis, and systemic signs of infection along with a continued radiologic picture of pleural effusion and multiple air-fluid levels are clear indications for thoracotomy and pleural debridement.[2,3,13,22] The incidence of decortication in this series reflects our conviction that delay in the complete evacuation of pleural exudate has resulted in unnecessary morbidity and mortality. All but one of the patients whose empyemas were uncontrolled or caused their death suffered because of a delay in applying the appropriate treatment modality. Most had chest tubes left in place despite the clinical and radiologic evidence of pleural loculation and failure of adequate drainage.

The mortality in the group of patients treated by decortication was 18%. However, only two of the six died as a consequence of the procedure or of the inadequately treated empyema. The true mortality is, then 6%. This is not significantly different from the treatment results of simple tube thoracostomy. The important difference is that the group treated by open drainage and decortication had already failed nonoperative attempts at control of the pleural infection. These patients were, as a rule, septic and had multiple other medical and surgical problems. In this light, we concluded that thoracotomy carried an acceptable risk while providing an excellent chance for complete control of the empyema.

Timely decortication has proved to be a safe, effective means of dealing with empyema and it should not be delayed because it involves open thoracotomy.[3,13,15,17] The aggressive surgical evacuation of purulent debris and exudate from the pleura is often the most "conservative" in terms of patient well-being. Almost one-half of the patients on this series obtained control of their pleural infections by closed methods, which argues for a sequential approach to the problem. However, patients sustaining pleural infections from chest trauma, pulmonary infarction or immunodeficient states are best served by early open drainage and decortication.

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Ruptured Abdominal Aortic Aneurysm

A Twelve-Year Experience

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RUPTURED abdominal aortic aneurysms challenge the skill of all involved in treating them.[1] Hospital mortality remains high despite the lapse of 30 years since the introduction of definitive surgical treatment and the advances in anesthetic techniques and postoperative care. Review of the literature reveals that mortality continues to range from 34% and 86%, and is only very rarely reported below these figures.[2,3]

We operated on 235 cases of abdominal aortic aneurysms between 1967 and 1979, 46 (19.57%) of which were diagnosed in the emergency room as ruptured. Hospital mortality for the ruptured cases was 36.9%; hospital mortality in elective resections of abdominal aortic aneurysm was 4.23%. We have studied these 46 patients retrospectively to identify factors responsible for the high frequency of death in patients with this complication.

Materials and Methods

Hospital and office records of patients identified as having been treated for ruptured abdominal aortic aneurysms during the 12 year span were reviewed after that time. Six patients were female and 40 were male. Ages ranged from 43 to 83 years with a mean age of 69 years. Diagnosis of ruptured abdominal aortic aneurysm was made six hours to one week after the onset of symptoms. All patients presented moderate to severely acute abdominal symptoms and all had a palpable mass either in the midline or to the left side of the abdomen, rarely to the right. When vital signs were stable, pulsations over the mass could be elicited on gentle examination. Thirteen patients suffered abdominal pain and 10 complained of back pain. Pain in the groin and testicles was never the only presenting complaint, but was reported in many cases. Nearly 60% of the patients were seen within six to 12 hours after onset of symptoms.

About half the patients studied came to the emergency department with blood and fluid replacement already instituted by the referring physician. Systolic blood pressure upon arrival was about 90 mm Hg in 28 patients, below 90 mm Hg in 18 patients. Rarely and only when the diagnosis was suspicious and the condition was stable were chest and abdominal films and intravenous pyelograms attempted. Concomitant cerebrovascular, coronary, renal, and respiratory disease was not assessed unless clinically obvious because of the emergency nature of the condition. While the abdomen was shaved in the emergency room, two large intravenous catheters were inserted and a Foley catheter placed in the bladder. Prophylactic antibiotics were administered and at least eight units of whole blood were immediately typed and cross-matched. No time was wasted in taking the patient to the operating room.

Operative Technique, Findings and Intraoperative Precautions

The patient's abdomen was quickly prepared and draped while anesthesia commenced almost simultaneously, often after intubation while awake. Rapid midline laparotomy was performed and the aorta controlled to counteract profound shock. Rapid finger dissection of the abdominal aorta below the renal arteries preceded immediate cross-clamping. The iliac arteries were then cross-clamped and the aneurysm opened

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without attempting to remove the sac.[4,5,6] All clots were removed and the bleeding lumbar arteries transfixed from within. When difficulty was encountered in controlling the aorta below the renal arteries, the aorta was exposed and cross-clamped below the diaphragmatic crus.[7] Trans thoracic control was attempted only once, in a patient with profound shock. Despite successful control of the aorta, this patient died of cardiac arrest at the conclusion of the procedure.[1,2,8,9]

Heparin was not given after the aorta was cross-clamped, in an attempt to lessen the amount of bleeding. All grafts used for replacement were knitted dacron grafts which at times were preclotted. Straight tube grafts were used in 20 patients and bifurcation grafts in the remainder.

Intraoperative blood replacement ranged from 1500 to 7500 cc's with an average of 4000 cc's. Equal or slightly more amounts of crystalloid replacement were given. Operative time ranged from one hour and 15 minutes to three hours and 20 minutes with an average of two hours and 20 munutes.

Before declamping the aorta, sodium bicarbonate and steroids were given and repetitive temporary digital occlusion of the aortic graft was done to avoid hypotension. Anastomotic lines were meticulously checked for leaks and covered with gelfoam soaked with topical thrombin. The residual aortic sac was sutured around the graft and the posterior parietal peritoneum closed to further isolate the duodenum and small bowel from the lines of the anastomoses. The small bowel and colon were carefully inspected prior to closing the abdomen. In all cases, the inferior mesenteric artery was either thrombosed or ligated. Attempts were always made to preserve at least one of the hypogastric arteries to minimize bowel ischemia. Before closing the abdomen, femoral and foot pulses were routinely checked for possible peripheral embolization or thrombosis that could be treated during the procedure.

Postoperatively, the patients were watched closely in the recovery room and intensive care unit. Vital signs, electrocardiography, central venous pressure, serial hemoglobin and hematocrit, electrolytes, arterial blood gases, fluid balance, and when possible, pulmonary artery and pulmonary capillary wedge pressure were monitored until the patient stabilized. Assisted ventilation was continued until the patient could be safely weaned, and nasogastric suction until the bowel recovered from the paralytic ileus.

All aneurysms were infra-renal in position. In a few cases, the aorta above the renal arteries was dilated but was not part of the aneurysm. The aneurysms were described as large in size in most cases. Two were described as small, measuring about 5cm in diameter. It was not clearly determined whether the anatomical configurations of the aneurysms were sacular or fusiform at the time of surgery. Most of the aneurysms ruptured retroperitoneally, although free blood was found in the peritoneal cavity of 25% of the survivors and in 47% of those who expired. None of the aneurysms ruptured into the inferior vena cava or duodenum, and a horseshoe-shaped kidney was not encountered in this series. One of the ruptured aneurysms was recurrent and had been resected a few years earlier in another institution.

Results

Seventeen (36.9%) of the patients studied died within 30 days of operation, four of these (8.7%) from profound shock and cardiac arrest during the procedure and after completion of graft replacement. One of these patients was a Jehovah Witness to whom blood could not be administered. Three of the remaining patients died of myocardial infarction within 24 hours after surgery. Three died of congestive heart failure and serious ventricular arrhythmias one to three weeks postoperatively. Two patients suffered respiratory complications, one dying from pulmonary embolism after 11 days and the other from aspiration penumonia after 16 days. Brainstem injury resulting from a fall more than four weeks after surgery led to the death of one patient; another died from a cerebrovascular accident after 13 days. Two patients died of septicemia. One of these had had a previous colostomy and abdominal perineal resection for cancer of the rectum. The second developed gangrene of the left colon two weeks postoperatively. Both died after three weeks. One patient died of hepatorenal failure of

TABLE 1.
SURVIVAL BY AGE AND SEX DISTRIBUTION

Age	Total Number of Patients	Female	Male	Survival
40-49yrs.	2	1	1	100%
50-59yrs	4	0	4	75%
60-69yrs	13	1	12	61.5%
70-79yrs	23	2	21	69.6%
80-89yrs	4	2	2	0
Mortality by sex			33.3%	37.5%

undetermined etiology 18 days after surgery. Acute renal failure contributed to the death of 11 of those who expired after surgery.

Among those patients who survived the ruptured aneurysm, the most common complication was ileus, which persisted seven to 12 days postoperatively. Mild to moderate atelectasis was also a fairly common complication. Stroke was noted to have occurred in one patient, pulmonary edema in one, and stress ulcer and gastrointestinal bleeding in one. Jaundice developed in three of the cases reviewed. One patient developed an ilio-femoral deep vein thrombosis, and two patients required femoral embolectomy under local anesthesia in the immediate postoperative period. Very mild acute renal failure occurred but posed no problem in seven patients who survived. We have not seen paraplegia as a complication of this operation in this series.

The twenty-nine patients who survived were followed two to eight years after surgery. Mean length of follow-up was 4.6 years. Five patients were lost to evaluation. Seven patients expired during the postoperative years: three of myocardial infarctions, two of cancer, and two of undetermined causes. The calculated 4.6 year survival for those who survived operation and left the hospital is 71.7%; for the whole series, 45.2%.

We noted no aortoenteric fistulization or false aneurysms on any patient in this series. Seventeen patients remain alive and doing well after two to eight years.

Discussion

Abdominal aortic aneurysms have a high incidence of rupture, larger aneurysms bearing greater risk, although small aneurysms are not

TABLE 2.
MORTALITY AND AGE

Age	Number	Mortality	
		Number	Percent
—	46	17	36.9%
>70yrs	27	11	40.7%
<70yrs	19	6	31.6%

TABLE 3.
INFLUENCES ON MORTALITY

	Number of Patients	Expired	Survived	Mortality
Admission systolic blood pressure				
BP<90	28	8	20	28.5%
BP<90	18	9	9	50%
Free blood in peritoneal cavity*	15	8	7	53.3%

*All patients had large retroperitoneal hematomas.

immune. Without surgical repair mortality is 100%.[1,2,10] With operative treatment, mortality remains high.[4] No patient should be denied surgery unless he experiences such profound shock and coma that vigorous resuscitation fails to improve his neurologic status. Concomitant cerebral, respiratory, cardiac, or renal disease does not contraindicate surgery unless the patient's life expectancy is already quite shortened.[11]

Operation should be undertaken without regard for immediate availability of blood.[1,2,7,8,12,13] Very low hematocrit and hemoglobin can be well tolerated under anesthesia, but sustained shock can cause irreversible damage to vital organs. We found that survival in patients below 70 years of age (68.5%) was more frequent than in patients above 70 years (59%), probably reflecting the better ability of younger patients to withstand blood loss and shock. However, age itself poses no contraindication to surgery.[2,4,11]

Impending rupture of the abdominal aortic aneurysm is easily confused with acute or subacute abdominal conditions, eg, renal colic, appendicitis, diverticulitis, cholecystitis, peptic ulcer disease, and pancreatitis.[8] A high degree of suspicion can speed preparation for surgical repair.[12] The classical triad of pain, shock, and

TABLE 4.
MORTALITY AND RENAL FAILURE

	#Patients	Expired	Survival	Mortality
Acute tubular necrosis Good urine output No dialysis	13	4	9	30.7%
Acute tubular necrosis Oliguric or anuric Hemodialysis	5	4	1	80%
TOTAL	18	8	10	44.4%

pulsating or nonpulsating abdominal mass is a very late finding and may be missed in obese patients. A vague abdominal mass and tenderness should alert the physician to the possibility of aneurysm. In reviewing our cases, we noted that lumbo-sacral back pain or abdominal pain and tenderness in the presence of an already suspected aortic aneurysm had prompted us to operate immediately.[12]

Once the diagnosis is made, no time should be wasted on unnecessary workup or on trying to stabilize the condition. The patient should be taken to the operating room without delay.[1,2,3,8] Stable blood pressure in the suspected leaking aneurysm is a dangerous sign. This is a transient finding; lethal shock can occur very quickly. We have had no experience with the application of circumferential pneumatic pressure about the lower extremities and abdomen. This, however, may buy valuable time before the patient gets to the emergency room and the operating room.[1] Nearly three-fourths (71.4%) of the 28 patients who arrived in the operating room with a systolic blood pressure above 90mm Hg survived; only half (50%) of the remaining 18 whose pressure had fallen below 90mm Hg recovered.[9,14,15] A well-orchestrated approach by the anesthesiologist, the operating room staff, and the surgical team is mandatory. Rapid induction of anesthesia while the abdomen is being prepared and rapid control of the proximal aorta to counteract profound shock gives a good chance of a successful outcome. Muscle relaxants should not be used until the abdomen is open, since tamponade of the leak is removed and immediate loss of blood pressure may result.

TABLE 5.
MORTALITY AND SEVERITY
OF AORTOILIAC DISEASE

Type Graft	Number	Expired	Survived	Mortality
Straight	20	8	12	40%
Bifurcated	26	9	17	34.6%

Tamponading the aorta with a balloon catheter has been advocated by some as a method of obtaining proximal control, but we have not tried this.[1,9,16] Control of the aorta below or above the renal arteries or even above the celiac axis at the level of the crus of the diaphragm is a quick, effective method.[7]

Determiantion of blood loss is very difficult at the time of surgery. The margin between optimal fluid replacement and overloading may be narrow, especially in elderly patients and those with cardiac and respiratory disease. The most common cause of myocardial infarction perioperatively is severe blood loss and shock.[1,2] A Swan Ganz catheter into the pulmonary artery is recommended intraoperatively and postoperatively in lieu of empirical evaluation of fluid balance, but the operation should not be delayed for its insertion.

A shorter operative time is as effective as early diagnosis in successfully treating the problem. The aim should always be to save life rather than to totally correct all associated lesions during surgery. If the aorta above the renal arteries is dilated, no attempt should be made to extend the operation above these arteries. Moderate obstructive disease or moderate ectasia of the iliac arteries should be ignored.

A straight tube graft is a better option than a bifurcated graft because it minimizes dissection and reduces operative time. Bifurcation grafts should always be reserved for extensive disease of the terminal aorta and iliac arteries. When difficulty is anticipated and the operation will be prolonged with distal anastomoses to the iliac arteries, the common femoral arteries should be substituted without hesitation. In our series of patients, 20 patients received straight tube grafts and 26 received bifurcation grafts, evidencing extensive involvement of the distal aorta and iliac arteries. The survival rates of those in our study with each type of graft were nearly equal.

Free blood or fluid tinged with blood in the peritoneal cavity is an omnious sign. Mortality in these cases was 53%; cases of retroperitoneal hemorrhage suffered a significantly lower mortality (37%)[13] The presence of free peritoneal blood correlated highly with circumstances of profound shock. Rupture into the inferior vena cava or duodenum worsens the prognosis. When diagnosis of suprarenal aneurysms and horseshoe shaped kidneys is made by angiography, elective repair should not be delayed.

When the aneurysm has been resected and replaced and the condition stabilized, precautionary measures should be taken to minimize postoperative complicaitons. Anastomotic lines should be carefully checked for leakage. The operative field should be irrigated with warm saline solution and the suture lines covered with gelfoam soaked with topical thrombin or with a piece of omentum. The graft should be covered by closing the aneurysm sac over it and the posterior peritoneum then closed.

Knowledge of postoperative complications and plans for postoperative care are important.[4] Certain complications appear frequently after surgical repair of ruptured abdominal aortic aneurysms. Diagnosis and management require very close observation and a high degree of suspicion. Postoperative retroperitoneal hemorrhage is usually suggested by instability of vital signs and by a drop in systolic blood pressure and central venous pressure or pulmonary artery pressure. Serial hematocrits and palpation of the lateral abdomen can aid in detection of the hemorrhage, and the site should be immediately repaired. None of the cases we reviewed required re-exploration for intra-abdominal bleeding.

Thrombosis and embolization within the prosthesis and in the lower extremities can be detected by frequent manual palpation of the femoral arteries and foot pulses. Disappearance of previously present pulses, pain and pallor and coldness of the extremities usually require exploration. Two patients in this series developed femoral emboli postoperatively.

Acute renal failure heralded by progressive oliguria despite adequate volume replacement and intravenous diuretics necessitates nephrology consultation. Early dialysis may save the patient's life. Of our seventeen patients who suffered acute renal failure, five were treated with hemodialysis but later died of stroke, pulmonary embolism, respiratory arrest, septicemia due to colon necrosis, or multiple organ failure. Five did not need hemodialysis but died of similar causes. One anuric patient died from cardiac arrest within 24 hours postoperatively and before hemodialysis could be instituted.

Adult respiratory distress syndrome during the recovery period may be related to shock, massive transfusions, sepsis, pulmonary emboli, renal failure, and other unknown factors. Assisted ventilation, positive end expiratory pressure, continuous positive airway pressure, intermittent mandatory ventilation and consultation with a pulmonary specialist may facilitate survival.

Possibility of bowel ischemia should be kept constantly in mind. Shock and rigid abdomen may alert the physician to this complication. Early diagnosis can be made by inspection and biopsy through the sigmoidoscope. The abdomen should be re-explored as soon as possible and antibiotics and steroids administered immediately. We have seen this ischemia in one patient two weeks postoperatively, and death from sepsis resulted despite bowel resection and colostomy.

Postoperative jaundice occurs frequently, probably due to liver damage by shock and to absorption of the massive retroperitoneal hematoma.

Congestive heart failure, myocardial infarction, stroke, renal failure, pulmonary insufficiency, pneumonia, pulmonary emboli, intestinal obstruction, and sepsis are the leading causes of death in hospital. Later deaths among those who survive are mainly due to myocardial infarction and cancer.[4,6]

Summary

Ruptured abdominal aortic aneurysm is lethal. The likelihood of death is great unless the aneurysm is repaired electively before rupture. Forty-six cases of ruptured abdominal aortic aneurysms treated surgically between 1967 and 1979 were studied retrospectively; hospital mortality in this group was 36.9%. The calculated 4.6 year survival for patients who survived hospitalization was

71.7%. Overall survival for these years was 45.2%. Early diagnosis and prompt surgical repair are essential to survival, and rapid control of the aorta is mandatory to prevent lethal shock. Precautions should be taken during the procedure to minimize the possibility of postoperative hemorrhage, infection, and bowel ischemia. In our series of patients, cardiac complications were the most common cause of death intraoperatively and in the immediate postoperative period. Advanced age, perioperative shock, and coronary arteriosclerosis increased the risk of death.[2] Death in the late postoperative period was frequently caused by sepsis and respiratory, renal, and cerebral complications. Death during the years following surgery was primarily due to cardiac disease and cancer.[4] No patient with ruptured abdominal aortic aneurysm should be denied surgery unless he has suffered irreversible cerebral damage from shock or has a very limited life expectancy because of existing terminal disease.[3,11] We recommend early referral of abdominal aortic aneurysms for elective resection,[5,11] and early diagnosis and immediate repair of ruptured abdominal aortic aneurysms.[2,3,4,8,17]

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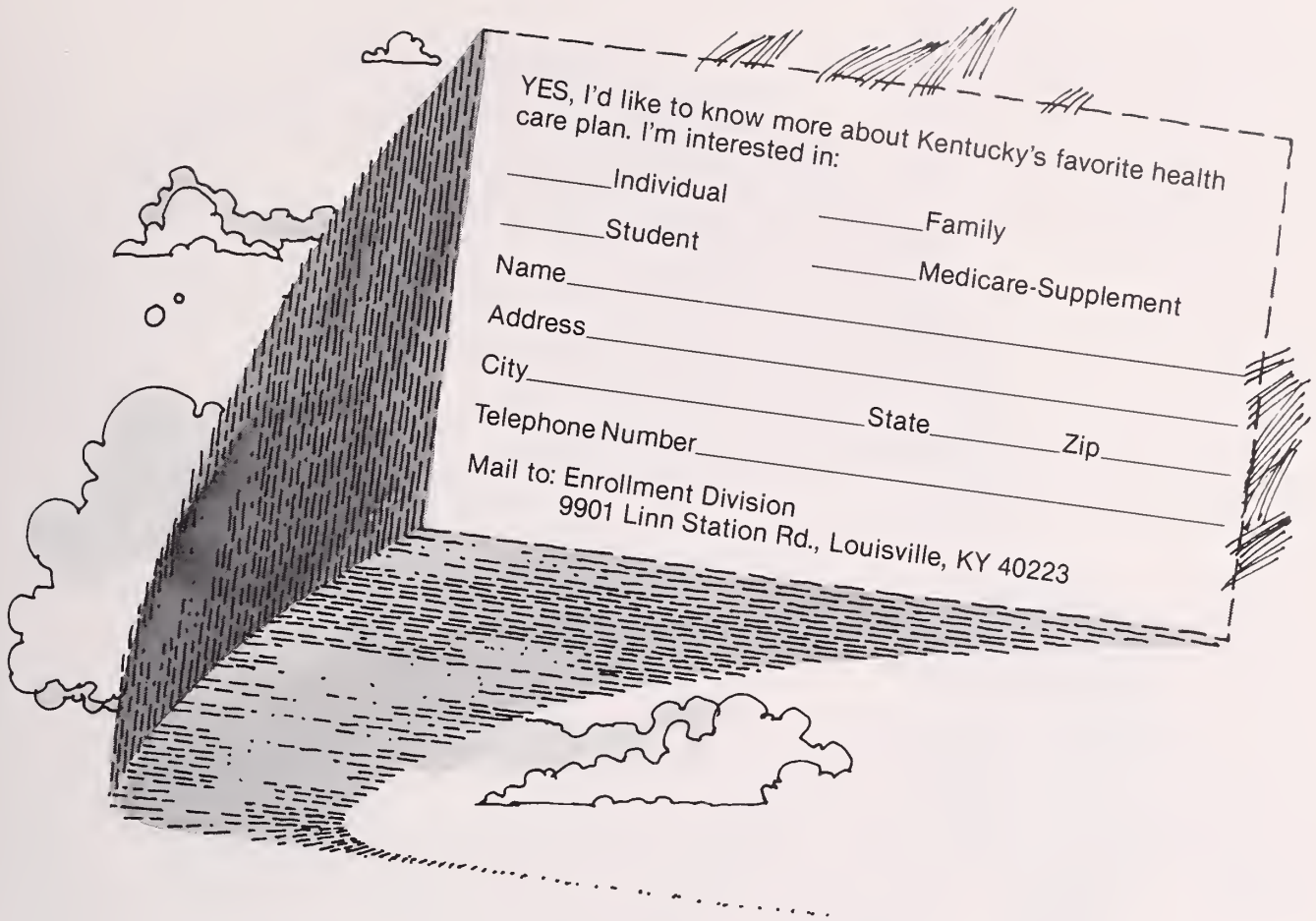
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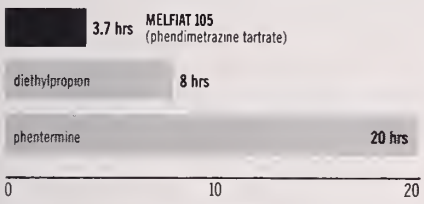


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Because MELFIAT 105 has a 3.7 hour half-life and low abuse potential.
Therapeutic efficacy combined with a short half-life and minimal abuse potential make MELFIAT 105 the drug of choice in the treatment of exogenous obesity. Because MELFIAT 105 has a short half-life, it minimizes drug accumulation and helps to eliminate such effects as disturbed sleep patterns. And, because MELFIAT 105 has significantly lower abuse potential than the amphetamines[1], there's less risk to your patients. According to a NIDA (National Institute on Drug Abuse) report, phendimetrazine appears to be the least abused anorexiant when compared to phentermine and diethylpropion[1].

Half-life comparison of MELFIAT 105 and other anorexiants[2]



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References: 1. Sheu YS, Ferguson JA, Cooper JR: *Evaluation of the Abuse Liability of Diethylpropion, Phendimetrazine, and Phentermine,* unclassified document ADAMHA, HHS. Office of Medical and Professional Affairs, NIDA, 1980.
2. Douglas JG, Munro JF: The role of drugs in the treatment of obesity, *Drugs* 21:362-373, 1981.

MELFIAT® 105 UNICELLES® C III
(phendimetrazine tartrate) Sustained-Release Capsules 105 mg

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MELFIAT® 105 UNICELLES® C III
(phendimetrazine tartrate) 105 mg Sustained-Release Capsules

INDICATIONS AND USAGE: Melfiat® 105 (phendimetrazine tartrate) is indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class (See CLINICAL PHARMACOLOGY) should be measured against possible risk factors inherent in their use such as those described below

CONTRAINDICATIONS: Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors (hypertensive crises may result).

WARNINGS: Tolerance to the anorectic effect usually develops within a few weeks. When this occurs, the recommended dose should be discontinued. Phendimetrazine tartrate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Dependence: Phendimetrazine tartrate is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of phendimetrazine tartrate should be kept in mind when evaluating the desirability of including a drug as part of a weight-reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high-dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG, manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

USAGE IN PREGNANCY: The safety of phendimetrazine tartrate in pregnancy and lactation has not been established. Therefore, phendimetrazine tartrate should not be taken by women who are or may become pregnant.

USAGE IN CHILDREN: Phendimetrazine tartrate is not recommended for use in children under 12 years of age.

PRECAUTION: Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine tartrate and the concomitant dietary regimen. Phendimetrazine tartrate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: Cardiovascular: Palpitation, tachycardia, elevation of blood pressure.
Central Nervous System: Overstimulation, restlessness, dizziness, insomnia, euphoria, dysphoria, tremor, headache; rarely psychotic episodes at recommended doses.
Gastrointestinal: Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances.
Allergic: Urticaria.
Endocrine: Impotence, changes in libido.

OVERDOSAGE: Manifestations of acute overdosage with phendimetrazine tartrate include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states.
Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma. Management of acute phendimetrazine tartrate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Acidification of the urine increases phendimetrazine tartrate excretion. Intravenous phentolamine (Regitine) has been suggested for possible acute, severe hypertension, if this complicates phendimetrazine tartrate overdosage.

DOSAGE AND ADMINISTRATION: Since Melfiat® 105 (phendimetrazine tartrate) 105 mg is a sustained-release dosage form, limit to one sustained-release capsule in the morning. Melfiat® 105 (phendimetrazine tartrate) is not recommended for use in children under 12 years of age.

HOW SUPPLIED: Each orange and clear sustained-release capsule contains 105 mg phendimetrazine tartrate in bottles of 100.

CAUTION: Federal law prohibits dispensing without prescription.

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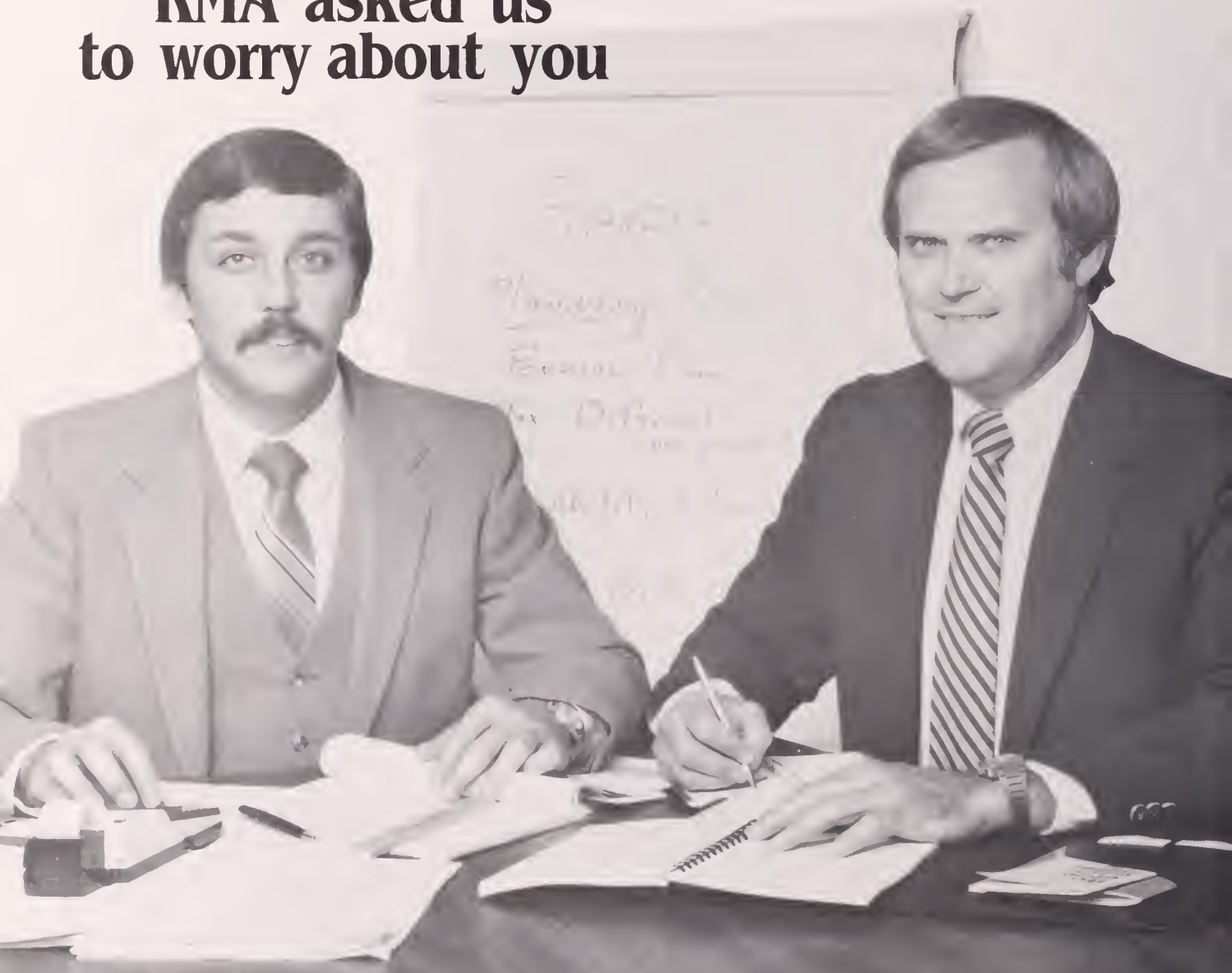
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See next page for brief summary of prescribing information.

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Dental pain and episiotomy pain are predictable, reproducible "standards" that make possible objective comparisons of effectiveness of different analgesic agents.

- Measured against 15, 30 and 60 mg doses of codeine phosphate in a double-blind study of 287 patients, 400-mg doses of ibuprofen proved "significantly better than codeine on almost all pain intensity, degree of relief and duration of analgesia parameters."[2]
- Measured against a propoxyphene-acetaminophen combination for pain relief after 3rd molar extractions, ibuprofen proved equally effective and caused fewer side effects. Ibuprofen was associated with faster recovery, evidenced by more rapid reduction of trismus and return to normal function.[3]
- Measured against post-episiotomy pain in 30 patients, "ibuprofen was effective in treating the swelling as well as pain...during the first and worst days. Therefore, it is not only the analgesic but also the anti-inflammatory effect of ibuprofen that are the beneficial factors..."[4]

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• better tolerated than aspirin	• combined side effects of two drugs—warning required about driving or operating machinery; possible respiratory depression with alcohol, tranquilizers, other common medications
• no narcotic risk, red tape, records	• narcotic precautions required
• matchless economy in a modern NSAID	

References:

1. Hart FD, Huskisson EC, Ansell BM in Hart FD (editor): Drug Treatment of the Rheumatic Diseases, 2nd Ed, Adis Press, Balgowlah, Australia, 1982, p. 30.
2. Rondeau PL, Yeung E, Nelson P: Canad Dent Assoc J 46:433-439, 1980.
3. Selwyn P and Giles AD: Br Jrl of Clin Practice, Supplement 6, Safe and effective analgesia following dental surgery: A comparison of brufen and distalgesic. Pg 87-90. 1980.
4. Taina E: Curr Med Res Opinion, 7:423-428, 1981.



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And Rufen® Measures Up Best

RUFEN® (ibuprofen) Tablets

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses:* hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

OVERDOSAGE: Acute overdosage, the stomach should be emptied. Rufen is acidic and excreted in the urine, alkaline diuresis may benefit.

DOSAGE AND ADMINISTRATION: Rheumatoid arthritis and osteoarthritis, including flareups of chronic disease: Suggested dosage 400 mg t.i.d. or q.i.d.

Dysmenorrhea: 400 mg every 4 hours as necessary

Mild to moderate pain: 400 mg every 4 to 6 hours as necessary for the relief of pain. *Do not exceed 2,400 mg per day.*

CAUTION: Federal law prohibits dispensing without prescription.

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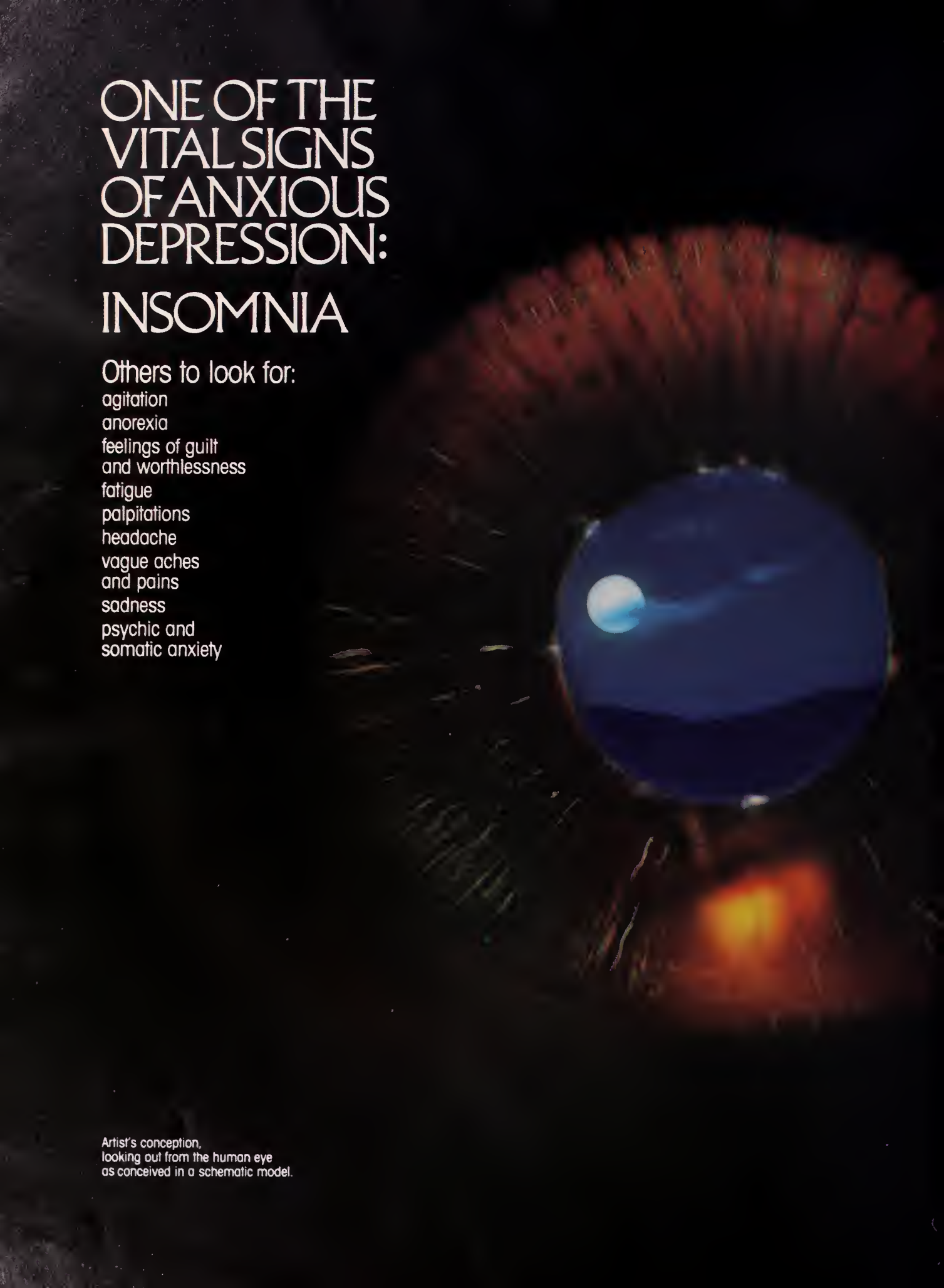
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INSOMNIA

Others to look for:

agitation
anorexia
feelings of guilt and worthlessness
fatigue
palpitations
headache
vague aches and pains
sadness
psychic and somatic anxiety



Artist's conception,
looking out from the human eye
as conceived in a schematic model.

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Limbitrol given once daily h.s. may be the best approach

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Specific therapy with h.s. dosage convenience

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LIMBITROL® TABLETS Tranquilizer—Antidepressant
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Indicatians: Relief af maderate ta severe depressian assaciated with maderate ta severe anxiety
Cantraindicatians: Knawn hypersensitivity ta benzadiazepines ar tricyclic antidepressants Da nat use with manaamine axidase (MAO) inhibitars ar within 14 days fallawing discantinuatian at MAO inhibitars since hyperpyretic crises, severe canvulsians and deaths have accurred with cancamitant use, then initiate cautiausly, gradually increasing dasage until aptimal respanse is achieved Cantraindicated during acute recavery phase fallawing myacardial infarctian
Warnings: Use with great care in patients with histary af urinary retentian ar angle-clasure glaucama Severe canstipatian may accur in patients taking tricyclic antidepressants and antichalinergic-type drugs Clasely supervise cardiavascular patients (Arrhythmias, sinus tachycardia and pralangatian at canductian time reparted with use af tricyclic antidepressants, especially high dases Myacardial infarctian and strake reparted with use af this class af drugs) Cautian patients abaut passible cambined effects with alcahal and ather CNS depressants and against hazardaus accupatians requiring camplete mental alertness (e g , aperating machinery, driving)

***Usage in Pregnancy:* Use of minor tranquilizers during the first trimester should almast always be avaided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend ta ar da became pregnant.**

Since physical and psychalagical dependence ta chlardiazepaxide have been reparted rarely, use cautian in administering Limbitral ta addictian-prane individuals ar thase wha might increase dasage, withdrawal symptams fallawing discantinuatian af either campanent alane have been reparted (nausea, headache and malaise far amitriptyline, symptams [including canvulsians] similar ta thase af barbiturate withdrawal far chlardiazepaxide)
Precautians: Use with cautian in patients with a histary af seizures, in hyperthyraid patients ar thase an thyraid medicatian, and in patients with impaired renal ar hepatic functian Because af the passibility af suicide in depressed patients, da nat permit easy access ta large quantities in these patients Periadic liver functian tests and blaad caunts are recammended during pralanged treatment Amitriptyline campanent may black actian at guanethidine ar similar antihypertensives Cancamitant use with ather psychatrapic drugs has nat been evaluated sedative effects may be additive Discantinue several days before surgery Limit cancamitant administratian at ECT ta essential treatment See Warnings far precautians abaut pregnancy Limbitral should nat be taken during the nursing periad Nat recammended in children under 12 In the elderly and debilitated, limit ta smallest effective dasage ta preclude ataxia, aversedatian, canfusian ar antichalinergic effects
Adverse Reactions: Mast frequently reparted are thase assaciated with either campanent alane drawsiness, dry mauth, canstipatian, blurred visian, dizziness and bloating Less frequently accurring reactians include vivid dreams, impatence, tremar, canfusian and nasal congestian Many depressive symptams including anarexia, fatigue, weakness, restlessness and lethargy have been reparted as side effects af bath Limbitral and amitriptyline Granulacytapenia, jaundice and hepatic dysfunctian have been abserved rarely
The fallawing list includes adverse reactians nat reparted with Limbitral but requiring consideratian because they have been reparted with ane ar bath campanents ar clasely related drugs
Cardiovasculor Hypatensian, hypertensian, tachycardia, palpitatians, myacardial infarctian, arrhythmias, heart black, strake
Psychiotric Eupharia, apprehensian, paar cancentratian, delusians, hallucinatians, hypamania and increased ar decreased libida
Neurologic Incaardinatian, ataxia, numbness, tingling and paresthesias at the extremities, extrapyramidal symptams, syncape, changes in EEG patterns
Antichalinergic Disturbance af accammadatian, paralytic ileus, urinary retentian, dilatatian at urinary tract
Allergic Skin rash, urticaria, phatasensitizatian, edema af face and tangue, pruritus
Hematologic Bane marrow depressian including agranulacytasis, easinaphilia, purpura, thrambacytapenia
Gastrointestinal Nausea, epigastric distress, vamiting, anarexia, stamatitis, peculiar taste, diarrhea, black tangue
Endocrine Testicular swelling and gynecamastia in the male, breast enlargement, galactarrhea and minar menstrual irregularities in the female and elevatian and lawering af blaad sugar levels
Other Headache, weight gain ar lass, increased perspiratian, urinary frequency, mydriasis, jaundice, alapecia, paratid swelling
Overdosage: Immediately hospitalize patient suspected af having taken an averdase Treatment is symptamatic and supportive I V administratian at 1 ta 3 mg physastigmine salicylate has been reparted ta reverse the symptams at amitriptyline paisaning See complete praduct infarmatian far manifestatian and treatment
Dosage: Individualize according ta symptam severity and patient respanse Reduce ta smallest effective dasage when satisfactary respanse is abtained Larger partian af daily dase may be taken at bedtime Single *h s* dase may suffice far same patients Lawer dasages are recammended far the elderly Limbitral 10-25, initial dasage at three ta faur tablets daily in divided dases, increased ta six tablets ar decreased ta twa tablets daily as required Limbitral 5-12 5, initial dasage af three ta faur tablets daily in divided dases, far patients wha da nat talerate higher dases
How Supplied: White, film-coated tablets, each cantaining 10 mg chlardiazepaxide and 25 mg amitriptyline (as the hydrachlaride salt) and blue, film-coated tablets, each cantaining 5 mg chlardiazepaxide and 12 5 mg amitriptyline (as the hydrachlaride salt)—battles af 100 and 500, Tel-E-Dase® packages af 100, available in trays af 4 reverse-numbered baxes af 25, and in baxes cantaining 10 strips at 10, Prescriptian Paks af 50

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Heat Induced Illness

R. D. Caldroney, M.D.

Heat illness remains a problem of considerable magnitude dramatized by the summer "heat wave" of 1980. The body's ability to eliminate heat is limited and any and all individuals are prone to heat illness, but especially prone are the elderly and those with chronic illnesses. The physiologic responses to a heat load are complex with the major defenses being the ability to eliminate heat via sweat and to direct blood flow to the skin and musculature. The pathologic process is dominated by widespread tissue necrosis and edema. Not surprisingly the symptoms and signs of heat illness can involve any of the organ systems. Therapy of heat stroke consists of rapid cooling, volume resuscitation, and dealing with the sequalae from tissue necrosis and edema. Prevention by use of "good common sense" is the best cure.

The effects of heat, including vivid descriptions of heat stroke, have been recorded since biblical times. The recent heat wave in the summer of 1980 and the 1,265 deaths due to heat stroke[1] brought this age-old problem to the forefront of the lay and medical press once again.

The impact of heat related illness far exceeds that directly attributable due to heat stroke deaths. In larger metropolitan areas death rates in the elderly up to 800% above normal have been recorded during heat waves. Indirectly heat effects may contribute to as many as 4,000 deaths per year.

A variety of predisposing causes for heat illness have been described.[2,3,4] In nonexertional heat illness, a disease of the elderly, these largely revolve around underlying illnesses (especially cardiovascular diseases, diabetes mellitus, alcoholism, and certain medications, especially psychotropic drugs) that impair the normal adaptations to an environmental heat load. In exertional related heat illness occupation (miners, merchant marine, etc) or avocation (athletes) provides the "risk" for these young, healthy individuals.

From the University of Kentucky Medical Center, Division of General Internal Medicine, Lexington, KY 40536

The physiological consequences and adaptations to heat have been reviewed in detail.[3,5] With exposure to an environmental heat load or with the internal generation of heat as a result of exertion a complex series of events occur that allow the excess heat to be dissipated. However, even in individuals in robust health the heat elimination system cannot remove more than 600-650 Kcal/hr, via sweating, while the amount of heat generated (internally and externally) may exceed this by a considerable degree (up to an excess of 400 Kcal/hr), making it easy to envision the rapidity with which heat overload can occur.

The major adaptations to heat exposure, both acute and chronic, involve integrated cardiovascular responses and changes in sweat volume and composition. The most important cardiovascular response is to markedly increase blood flow to the musculature and skin. This serves to supply blood to exercising muscle and especially to help in sweat production so that the heat load can be rapidly eliminated. This augmented blood flow is brought about by a considerable increase in cardiac output (up to 17 liters/min) and by a significant fall in peripheral vascular resistance. Acutely the redistribution of blood volume and the loss of fluid via sweat causes a decrease in effective arterial blood volume and creates the

potential for ischemia to any and all of the vital organs. With heat adaptation the cardiovascular response to a heat load becomes much more efficient (greater maximal cardiac output, improved contractility, increased blood volume and total body water) in a manner very similar to that seen in well conditioned athletes.

As stated before, the major source of heat elimination is via the evaporation of sweat. Large amounts of sodium containing fluids can be lost in sweat and act to decrease plasma volume. With adaptation to heat two major responses occur. More sweat per hour can be produced and therefore more heat can be eliminated. More importantly, the concentration of Na^+ per liter of sweat diminishes. This latter response occurs under the influence of increased aldosterone levels. However, it is important to stress that even though the amount of Na^+ lost per liter of sweat is decreased the sweat volume capacity is increased and overall this creates the potential for the continued large losses of Na^+ via sweat, even in well acclimated individuals.

The exact mechanism(s) of heat related injury are unknown[3,6] but certainly involve direct thermal injury to some extent. Not unexpectedly, the pathological manifestations of fatal heat stroke are dominated by widespread hemorrhage and tissue necrosis, especially in the brain, kidneys, muscle, heart, and liver.[7]

A variety of heat related illnesses have been described.[3,4,5] The "minor" forms, **heat edema, heat syncope,** and **heat cramps** pose little hazard if recognized and treated appropriately. The "major" forms, heat exhaustion and heat stroke, are associated with significant morbidity and mortality, even if appropriately recognized and treated. The remainder of this discussion will be in relation to the presentation and management of the "major" heat related illnesses—heat exhaustion and heat stroke.

Heat exhaustion is the most common heat related illness.[3] While usually a self-limited event it not infrequently may merge on into classical heat stroke, with its much greater morbidity and mortality. Heat exhaustion is broadly categorized, based on the serum Na^+ concentration, into hypertonic and hypotonic forms. While this division serves to emphasize the different clinical features it should by no means imply that considerable overlap does not exist.

In the **hypertonic form,** the individual is losing large volumes of Na^+ and H_2O, in hypotonic proportions in sweat, which he or she is unable to replete, for any of a variety of reasons. Hypernatremia is therefore a common finding. The clinical features include an intense thirst, fatigue, anxiety and impaired judgment. The patients' temperature is elevated, though not to the levels seen in heat stroke and the patients are volume contracted. Therapy consists of volume repletion, with isotonic fluids, and removing the individual from the source of heat. Since this form of heat exhaustion is most often seen in persons heavily exerting in a hot, humid environment its recognition is usually not difficult.

In contrast, the **hypotonic form** of heat exhaustion is treacherous because of its non-specific manifestations (weakness, fatigue, headache, nausea, vomiting and diarrhea) that are often passed off as the summer "flu." Most patients are significantly volume contracted but are hyponatremic due to water intoxication. Body temperature is usually normal. If these symptoms and signs are seen in an individual undergoing exertion then the diagnosis is fairly simple. The "treachery" lurks in the non-exerting individual in whom the diagnosis is not entertained. In the larger reviews of heat stroke a small but significant proportion of the elderly presenting with heat stroke had symptoms of this hypotonic form of heat exhaustion in the day(s) preceeding.

Heat stroke is traditionally diagnosed by the classic triad of hyperthermia—core temperature $> 41°C$ (106°F), an alteration in mental status, and dry, hot skin. The abscence of one or more of these features by no means excludes the diagnosis. For example, unless temperature is measured with a thermometer placed well (>20 cm) into the body core a falsely low value may be obtained. In addition, it has been described that in up to 50% of cases of exertion related heat stroke the patient may still be sweating on presentation.[3]

In the bulk of patients (70%) the neurologic presentation is coma. A vast array of neurological signs and symptoms have been described. One that deserves special emphasis is the pupillary reaction. It has been reported that some patients may present with fixed, dilated pupils who when cooled regain pupillary reactivity. This is one situation in which an absent pupillary response does not invariably imply a poor prognosis (unless the deficit persists after cooling measures).

The circulatory findings vary considerably and are especially dependent on whether the case is exertional or non-exertional.[8] In exertionally related cases generally the patient appears hyperdynamic, (bounding pulses, "active" precordium), although blood pressure is often low or low normal. In contrast, in non-exertional heat stroke, especially in the elderly, a hypodynamic presentation (thready pulse, "shocky") is all too common and blood pressure is often quite low.[9] In those individuals presenting with a hypodynamic picture mortality rates are quite high.

Hematologic abnormalities are frequent, with some measureable evidence of a coagulopathy in most patients.[10] In severe cases a Disseminated Intravascular Coagulation (DIC) picture is often seen pre-terminally.

Almost all patients have or will have some evidence of hepatocellular injury in the form of elevations in SGOT, SGPT, Bilirubin, or LDH.[11] In fact, the South African and Israeli authorities on heat stroke consider the absence of significant enzyme elevations to virtually exclude the diagnosis of heat stroke. In severe cases hepatic necrosis may ensue.

A variety of renal effects have been described,[3,4,5] the most important being acute renal failure, occurring in roughly 25-30% of exertionally related cases and 5% of non-exertional cases. The renal injury is multifactorial but a common culprit is rhabdomylosis.

An array of electrolyte findings have been reported.[3,12] Two which deserve specific mention are hypokalemia and hypophosphatemia. Both are seen more commonly in exertional related heat stroke and both have been purported to play a role in the muscle injury and renal failure of heat stroke. Hypoglycemia may be seen with exertional heat stroke and should not be overlooked as a very treatable cause of the altered sensorium.

Specific lung injury is unusual. Temperature correction of arterial blood gases is mandatory. If not appropriately corrected the values will reflect an erroneously low P_aO_2, high P_aCO_2, and high pH.[13]

Therapy of heat stroke revolves around the efforts to lower body temperature, dealing with the shifts in fluid volumes that transpire with cooling, and the sequalae due to coagulative necrosis and tissue edema.[1,2,3] **Cooling,** by whatever means possible, **is the most important therapeutic manuever.** In the larger reviews of heat stroke it has been repeatedly shown that delays in cooling are invariably associated with heightened morbidity and mortality.

During cooling four events should be anticipated. First is the onset of shivering, which may increase heat production and further damage the musculature. The shivering can be controlled with a variety of drugs, the most popular being Chloropromazine or Thiopental. Second, is the common onset of vomiting and seizures with the major immediate hazard of both being pulmonary aspiration. In fact many of the authorities on heat stroke suggest that unconscious patients should be intubated prior to cooling measures, because of the risk of aspiration. Third is that thermoregulatory balance is impaired and if cooling efforts persist as temperature approaches normal an "overshoot" may be seen and dangerous levels of hypothermia ensue. It has been suggested that direct cooling efforts be stopped when core temperature is $\leq$ 102°F to prevent this "overshoot." Fourth, is that with cooling there is a shift of blood volume from the periphery into the central circulation. With this shift blood pressure usually, but not invariably rises. In spite of the increase in blood pressure most patients are still volume contracted and on average will require 1500 ccs of an isotonic fluid.[1] If blood pressure does not rise appreciably with cooling then two potential explanations should be sought out. The first is pump dysfunction from heat induced coagulative necrosis of the myocardium or rarely a myocardial infarction. The second, which occurs most commonly in the elderly, is marked volume contraction.[9] The best method to discriminate between these two is a pulmonary artery catheter.

Immediate sequalae which are both common and potentially lethal acute renal failure, acute hepatic necrosis, cerebral edema, and DIC.[1,2] Individual therapy for each is beyond the scope of this discussion.

Poor prognostic features are delays in cooling, increased age, clinical DIC, SGOT $>$ 1000, low cardiac output on presentation, and coma lasting $>$ 24 hours. In spite of our detailed knowledge of the pathophysiology of heat induced illnesses mortality remains as high as 80%, in the elderly.[1,9]

Prevention certainly is the best cure. A variety of measures have been suggested all of which are simply "good common sense."[14] Exercise in a hot, humid environment should be undertaken in a gradual, graded pattern. A liberal intake of fluids, beyond that perceived by the thirst mechanism, is a must. The exact type of fluid, especially as to its salt content, is a subject of debate. Whatever fluid is used, the emphasis should be on accessability and palatability. In my mind, there is no more readily available and cheaper substitute than cooled water.

In summary, heat induced illness remains an all too common problem with considerable morbidity and mortality. A working knowledge of the pathophysiology of heat injury and the physiology of heat elimination and acclimization provide the basis for a rational approach to treatment. Therapy for heat stroke involves rapid cooling, support of blood volume, and anticipation and treatment of the various sequalea. Prevention remains the best cure.

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*Pharmacokinetics cannot as yet be directly related to efficacy.
†All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

See important information on following page.

Ativan® (lorazepam)℞ for Anxiety

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient.

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy.

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed.

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk.

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan®
for (lorazepam)®
Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

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Health and Safety Tip From the American Medical Association

MARKERS LISTED TO IDENTIFY ALCOHOLICS

How can you tell that a regular, heavy drinker has crossed over the line and become an alcoholic, who no longer can control his or her drinking?

The American Medical Association in its Manual on Alcoholism points to some markers to help identify the alcoholic.

1. Increasing consumption of alcohol, with frequent, perhaps unintended, episodes of intoxication.

2. Drinking to handle problems or relieve symptoms.

3. Obvious preoccupation with alcohol and the frequent need to have a drink.

4. Surreptitious drinking or gulping of drinks.

5. Tendency toward making alibis and weak excuses for drinking.

6. Refusal to concede what is obviously excessive consumption and expressing annoyance when the subject is mentioned.

7. Frequent absenteeism from the job, especially following weekends and holidays.

8. Repeated changes in jobs, particularly if to successively lower levels, or employment in a capacity beneath ability, education and background.

9. Shabby appearance, poor hygiene, and behavior and social adjustment inconsistent with previous levels or expectations.

10. Persistent vague physical complaints without apparent cause, particularly insomnia, stomach upsets, headaches, loss of appetite.

11. Multiple contacts with the health care system with disorders that are alcohol caused or related.

12. Persistent marital and family problems, perhaps with multiple marriages.

13. History of arrests for drunkenness or drunken driving.

Submitted by the KMA Committee on Physicians' Health

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ONE FOR ALL – One tablet treats pinworm in any patient, regardless of age or body weight.* Obviates need to calculate individual dosages.

A single tablet eradicates pinworm in 95% of patients.

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DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival. In man, approximately 2% of administered mebendazole is excreted in urine as unchanged drug or a primary metabolite. Following administration of 100 mg of mebendazole twice daily for three consecutive days, plasma levels of mebendazole and its primary metabolite, the 2-amine, never exceeded 0.03 μg/ml and 0.09 μg/ml, respectively.

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (common roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections. Efficacy varies as a function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Whipworm	Common Roundworm	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5%-100%)	–	–

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.

PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults. The tablet may be chewed, swallowed or crushed and mixed with food. For the control of pinworm (enterobiasis), a single tablet is administered orally, one time. For the control of common roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days. If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as chewable tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium.

US Patent 3,657,267
December 1979

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JPI-282

An Open Letter to All Physicians With Physical Disability

The St. Paul-Ramsey Medical Education and Research Foundation has been actively involved in compiling a recourse directory for physicians with physical disability. The purpose of the project is to form a voluntary group of physicians to provide information and referral services as well as support and advocacy to physicians who incur the same disability and need specific information. I became deaf seven years ago just as I was completing medical school and can readily attest to the paucity of information available to this unique population. Existing rehabilitation programs are simply not equipped to deal with the situation.

The biggest problem we are encountering is that of identification. It is currently estimated that 4% of all physicians are not in active practice because of a physically disabling condition, and that 25% of the physicians have the potential to be rehabilitated into the active practice of medicine. In real numbers this constitutes 1% of the licensed physicians in this country or 4,500 physicians. Our goal is to identify these physicians and encourage their participation. To date we have placed advertisements in over 100 major medical journals and have had response from less than 200 physicians. In retrospect, it appears this was due to the use of inappropriate terminology in the ads. Physical disability does not imply inability. My use of the term "handicapped physician" was a misnomer since the majority of physically disabled physicians are not handicapped in their practice of medicine. I apologize for the inappropriate terminology and again ask that all physicians, active or inactive, with any type of physical disability contact me at St. Paul-Ramsey Medical and Educational Research Foundation, 640 Jackson St., St. Paul, MN 55101. We anticipate that the directory will be completed in 6-8 months and at that time it will be sent to only those physicians who are listed therein. Upon receipt of your initial response, information forms will be mailed.

All physicians with physical disability, no matter how small, are encouraged to respond. Information from a doctor with even a minor disability may be of value to another doctor with multiple disabilities. The cornerstone of this project is your participation.

Frank C. Zondlo, M.D.
St. Paul-Ramsey Hospital Medical Education and Research Foundation

SPECIAL ARTICLE

Louisville

ESLIE ASBURY, M.D.

I appreciate those kind words. After you have outlived all who know the truth about you, you get honorary degrees and finally an invitation to address the Innominate Club. And you get a laudatory introduction. We ancient ones do not regard such words and honors as mere flowers placed on an old man's grave. Justified or not, we cherish them. They relieve boredom, one of the hazards of old age. For those in their anecdotage, invitations to speak provide a captive audience for reminiscing, one of the privileges, not to say obsessions, of age. During the cocktail hour, someone asked why I looked so young at 87. I said it was due to the right genes, the right amount of whiskey and the right hair dye.

I have many pleasant memories of Louisville. At the turn of the century, I lived in Louisville four years while my father went to the University of Louisville Medical School, a very good school, even then. My father started as a teacher, as many doctors did in those days, and attended medical school belatedly with the help of a job as night superintendent of mails.

We lived at Eighth and Broadway. I sold newspapers at the Tenth Street Depot and worked on the delivery wagon of Scheppelman's Bakery on Market Street. We moved to the West End near the old National League Park at Twenty-Eighth and Broadway. In 1902, as a waterboy for the Louisville Colonels, I saw Honus Wagner, the most famous shortstop of all time, play his first game in his stocking feet. They couldn't find shoes big enough for him. This was just before Louisville lost Honus and its National League franchise to Pittsburgh. Cincinnati retained its place in the National League. Also, Cincinnati previously had used a third of its budget for 15 years to build the Southern Railroad to compete with the L & N. No other city ever built a railroad. This railroad and its major league status preserved Cincinnati's trade supremacy. Among Cincinnati's first settlers were a few Kentuckians, including John Filson who wrote the first history of Kentucky, but most were native-born Yankees, many of them pre-educated, and many had means and mercantile training. With the help of Larz Anderson of Louisville and Doctor Daniel Drake from Mason County, they created the Queen City of the West and in 50 years, a cultural center second only to Boston.

The early settlers were joined later by Jewish and Irish immigrants who became a part of the establishment, and in the last half of the century by a horde of Germans, many with education and mechanical skills who made Cincinnati the machine tool center. The hard-working Yankees and thrifty Germans teamed to set the conservative tone of the city, still so conservative that the employees of P & G and Milacron, the city's largest companies, have not found it necessary to join a national union. When I got to Cincinnati in 1914, it was like entering a foreign country. In Kentucky, German names became anglicized. In Cincinnati, they remained literal. I saw A. Heimerdinger's Barber Shop and Dinkelacker's Shoe Store. There was more hurry on the streets. The people were fatter and less formally dressed than the people of Louisville. Someone said the proud Louisvillians put it on their backs, while the thrifty burghers put it in the Bauvereins and on the table.

The mores were different. The women drank with the men. The humor was explicit and explicitness including four-letter words, was not withheld in the presence of women, unheard of in Kentucky.

The first street car on which I rode, an open one, was suddenly blocked by two wagon drivers in an argument over a minor accident. They were hurling obscenities. I ducked behind a seat, expecting fireworks. As usual, nothing happened. In Kentucky, such an affair would have ended in blood letting. That is why Kentuckians are more polite to one another.

Looking back, given my choice, I often wonder which of the two cities I would have preferred to live in. Financially, there was no question. When I started, Cincinnati had something Kentucky didn't have—money. Even in the depth of the great depression, I confess to an outrageous income. On the other hand, I would have enjoyed the southern atmosphere of Louisville where people picked more flowers along the way and where it was no sin to go racing and quail shooting. Actually, I experienced the best of both worlds.

My first look at the inside of a hospital was at Norton Infirmary. In 1903, my grandfather, deeply jaun-

Presented at the annual T. Cook Lecture of the Innominate Society

diced with a stone in the common duct, was operated on at Norton by Doctor Frank, father of Doctor Wallace Frank. The result was as usual at that time. The next day, I roller-skated out to see him breathe and bleed his last. I also did the only operation I ever did in Louisville at the Norton Infirmary. During the flood of 1937, a Henry County doctor called me to do an emergency operation on a prominent citizen. After I told him the roads into Cincinnati were closed, he said, "I can take him to Louisville. You can come down on the train and do it." I arrived at 10 p.m. Lamar Neblett, a native of Henry County, gave the anesthetic and I caught a 1 a.m. train back to Cincinnati.

In 1940, I had lunch at the Pendennis Club with Powel Crosley and Roy Burlew, owner of the Ken-Rad Corporation in Owensboro. We were on our way to the Derby. After lunch, Roy, standing on the curb with his back to the street, was nicked below the knee by the bumper of a taxi as it came to a stop. We were in a big crowd and I paid little attention to the incident. Our car pulled in behind the taxi. We went to the track and as the afternoon wore on, Roy complained of increasing discomfort. There was a bit of swelling near the head of the fibula. I ran into a local colleague and after the Derby we took him to the Norton Infirmary where films showed a crack in the fibula. I left Roy in the care of my friend, thinking he would be sent home wearing an elastic bandage and a crutch. I was amazed to learn Roy stayed six weeks at Norton in a special suite equipped with two company secretaries. Roy was in bed in a leg cast. I never learned whether the long hospital stay was the idea of Roy or the surgeon.

My first surgical experience was with a Louisville surgeon. In 1914, I assisted Doctor George Hendon when he removed a large ovarian cyst in the house of a patient in Henry County. Later I came to know Doctor Hendon at surgical meetings and admired his wit and ability. In 1930, we were co-speakers at a county medical meeting in Eminence. The Bank of Kentucky had just failed and I didn't know that Doctor Hendon had lost a fortune in the disaster. During dinner I made a critical remark about Luke Lea, Rogers Caldwell and the Louisvile principal in the bank promotion. Instead of a conversation, I got a rebuke. "It wasn't their fault," he said.

I also had early contact with Doctor Hendon's able associate, Frank Strickler, In 1926, and for several years, I got together a group of Cincinnati specialists to do an annual four-day survey of the Berea College students. One boy had been operated on by a Louisville surgeon for a foot deformity. The result was good and I told the boy he should let his surgeon see it. A week later I received a letter from Dr. Strickler, whom I had not met. "Dear Asbury," he wrote, "I want you to know I can tell my patients when to come back." That fall, a colleague and I, on our way to the Southern Surgical, stepped out on the platform as our train stopped at the Tenth Street Depot. When a large fellow came along to get on the train, my friend said, "I want you to meet Frank Strickler." Ducking behind my friend, I said, "I doubt if Doctor Strickler wants to meet me." We became great friends.

My only social medical experience in Louisville was a lunch at the Pendennis Club in 1923. The host was Doctor Fred Rankin and the other guests were my father, Doctor J. Garland Sherrill and Doctor Morrison, an internist. I was home on vacation during my surgical residency at the Mayo Clinic. Fred had just left the Clinic to start a dismal year as Surgery Professor at the University of Louisville. Doctor C. H. Mayo, Fred's father-in-law, made a much publicized visit, yet, Fred later told me, the only bonafide cases referred to him in Louisville were three sent by my father. When Doctor Woolfolk Barrow was killed in an accident, Fred jumped at the offer of the Lexington Clinic. After three years he was recalled to the Mayo Clinic. He remained there several years until he committed a Mayo Clinic mortal sin. He succumbed to the cult of personality. Fred's Napoleonic complex filled him. W. J. Mayo said the Clinic wasn't big enough for both him and Doctor Rankin. In the depth of the depression, the Clinic bought the big house Fred had built on "Pill Hill," and he was exiled. For his Elba, he naturally chose Lexington. His Elba became an Elysium. Fred continued his great success in surgery and medical politics. Second only to his old chief, E. Starr Judd, he was the best abdominal technician I ever worked with or saw and he became the President of four major, national surgical organizations. Our paths crossed many times. I first knew Fred in my early years at the Mayo Clinic. Fred was in charge of the first assistants and residents and he was a tough taskmaster. I survived because of baseball. He was a fanatic about the game. Too small for other sports, Fred, like Harvey Cushing, played college baseball. I played weekends on the Rochester Black Sox team, composed of former White Sox players, expelled for throwing the 1919 World Series to Cincinnati. Fred attended all games.

In Lexington, Fred became equally fanatic about racing and breeding. When I got my farm, Keeneland was in the planning stage. Fred was a great friend of Hal Price Headley and Louis Beard, the founders, and through them, I became a founder life member of the Club and a member of the board, the only present

surviving member. His friends also put Rankin on the original board of Keeneland and he became a pedigree pundit. Hal Price Headley remarked that Fred was the greatest horseman in the world—**without a horse!** After he operated on Col. E. R. Bradley, Mr. Bradley, as a tip, gave Fred a free season to Blue Larkspur. Having no mares he had to borrow one. The result was a $5,000.00 plater, the only horse he ever owned.

Fred never missed an opportunity to help a friend or to stab the opposition. At the 1927 AMA Meeting in New Orleans, Fred was Chairman of the Surgical Section. I had a paper on Surgery in Pulmonary Tuberculosis. For added prestige, I listed Doctor Kennon Dunham as the Co-Authur. Doctor Dunham, older, famous, a pioneer in chest radiology, discovered "Dunham Rays," sure diagnostic X-ray signs of incipient tuberculosis. As my adviser and having referred the cases on which the paper was based, Dr. Dunham expected to read the paper. Fred wrote us a letter stating that I, as the surgeon, **must** read the paper.

Fred served in World War I and made a great sacrifice to serve in World War II. Though over military age, he consented to act as placement director of personnel for the Surgeon General. Nick Carter of Cincinnati was his associate. Fred had not forgiven the Mayo Clinic. When a Clinic unit was formed, including his brother-in-law, C. W. Mayo, Fred relegated it to a remote pacific outpost.

In 1947, we had C. W. Mayo and his wife Alice as guests at the Derby. That morning at the farm, Alice, getting over a virus, complained of back pain. We gave her aspirin and drove to the Derby. That afternoon, she still complained. I ran into Rankin and we took her to the first aid station where we found nothing. It was the first time Chuck Mayo and Fred had communicated for many years. Fred said, "Chuck, let's bury the hatchet." "It's too late," replied Chuck, "you have already buried the hatchet. You buried it in my back." The next day, Alice, feeling fine, attended our annual farm Derby lunch, and a Canadian friend flew them back to Rochester. Three days later, Alice arrived in Washington, D.C. with acute appendicitis. John Lyons removed a gangrenous appendix and the story went around that Fred, Chuck, and I had all missed the diagnosis.

When I first observed the medical scene at the turn of the century, each crossroads in rural Kentucky had two or three men, licensed by years of practice, starving typhoid patients and freezing appendicitis. Their office practice amounted to nothing. People came in to buy a dime's worth of Calomel or a quarter's worth of tonic. No examination was done. The doctors spent their time driving in a horse and buggy to see tuberculosis and typhoid cases, prevalent at that time. Surgery was a last recourse. Surgery of convenience was not done. People were not referred to medical centers and did not seek outside help on their own. Bad roads made ambulance transportation difficult, the people feared hospitals and the expense, and the doctors wanted to keep the patients under their care. As a result, city surgeons were called to do emergency surgery in the house of the patient. Fee splitting was the custom, indulged in by all except rare individuals. Even John B. Murphy, the greatest surgeon of his time, the man who trained the Mayo brothers, was convicted of this practice by the Chicago Surgical Society. I was thankful that my chief Kentucky competitor, Doctor Irvin Abell, was not a fee splitter. As President of the American College of Surgeons, Doctor Abell conducted the campaign which all but eliminated fee-splitting.

The first operation I did was in 1919 in the home of a patient in Henry County. I was an intern in the Cincinnati General Hospital when my father called me to bring anti-diptheritic serum for a boy with laryngeal diptheria. A nurse suggested I take along a tracheotomy tube. The patient was the only child of parents who had many relatives. I arrived to find the house and yard full of people and the boy gasping for breath. In spite of the serum, the boy stopped breathing. I straddled the patient lying deep in a featherbed and did a tracheotomy. Anaesthesia was not necessary. The father staggered out on the porch and announced his boy was dead. The papers spread the story we had brought the boy back to life. The overwrought father wanted to deed me his farm. Four days later, at the father's insistence, I came back to remove the tube. The boy had recovered, the father had recovered and asked for my bill. My expenses were about $50 and I added the biggest figure I could think of—one hundred dollars, total $150. The father said, "I have had a bad tobacco year. Could you make it an even hundred?" I learned early the value of the old adage, "Render the bill while there is still a tear in the eye." The patient, Drane Scott, now aged 74, has made his home in Louisville, the long-time sales manager of a large paint company.

My home community wanted to build a hospital, but the next spring I started my fellowship at the Mayo Clinic. I got this idea while having a beer and free lunch in a Cincinnati saloon. The saloon keeper introduced me to a leading practitioner who said, "I have to send my serious surgical cases to the Mayo Clinic or Johns Hopkins. You boys ought to do something about it." Cincinnati was filled at that time with surgical half-breeds who had merely worked with

19th century surgeons. They were still giving routine strong purgatives the day after laparotomies. Intravenous fluids and blood transfusions were unknown. About 15 attended the local medical society meetings. One old-timer did belong to the Western Surgical Association, but for two years in a row, I was the only Cincinnati doctor present at AMA meetings, and the first graduate of the University of Cincinnati to leave the city for full surgical training.

I had been at the Clinic only two weeks when Jack Slaughter, an immigrant merchant of Eminence, Kentucky, arrived with his gallstones. There were a number of men on the surgical staff but everyone wanted a Mayo. Mr. Slaughter had read in the Henry County News that I was "called by the Mayos," as the paper put it. When he was placed on W. J. Mayo's list, he protested. In broken English, he said he had come to have me do the operation. Doctor Will didn't know I existed but he was diplomatic, sent out to find me, introduced me to Mr. Slaughter and assured him I would be his associate. By special dispensation, I **was** fourth-assistant.

During my years at the Clinic, while home on my annual two weeks vacation, I did many operations in the homes of patients, saved up for me by my father and other doctors. After settling in Cincinnati, I continued this practice until 1935, removing appendices, gallstones, fibroids, hernias and tumors, using trains, Model-T Fords, and horses. Several times I got stuck in creeks and in the mud. They were all-day jobs. We moved the furniture and carpets, dampened the floor and set up a $15, portable, World War I operating table. My best assistant was Leslie Smith of Newcastle who had taken a Red Cross correspondence nursing course. If the operation was at night, he held a flashlight. In my early years I did cases in country hospitals for Doctor Taylor of Maysville, Doctor McDowell of Cynthiana and Doctor Charles Daugherty of Paris. I was proud to be associated with these outstanding men and with Doctors Charles Aitkin of Flemingsburg, John Scott of Lexington and Allen Donaldson of Carrollton.

Doctor Aitkin, who graduated in 1875 and who did the first but unrecorded hysterectomy in Kentucky, often took six or eight cases to the Mayo Clinic where I met him. Doctor Will Mayo met him at the train. When I got to Cincinnati he brought groups of patients to me.

Dr. Allen Donaldson had the first X-ray machine in Kentucky and a wide consulting practice. After his brother Lyter, as State Highway Commissioner, built the Donaldson Trail, it was easy to send cases from Carrollton to Cincinnati. Among them were a number with cancer of the breast. Unlike my Cincinnati patients, these people miraculously survived without metastases. If any reason other than luck was involved, I haven't the answer. In my experience the incidence of cancer among rural Kentuckians is less and their survival rate is greater. This could be worth a study.

Surgery was different in various centers in the 1920's. Leaving the Clinic in 1925, Mary and I went on a clinical trip of several months before settling in Cincinnati. Armed with letters from W. J. Mayo, we visited the leading centers on the East Coast, England, Scotland and the Continent. At that time, the controversy between silk and catgut techniques was at its height. Using the English-oriented catgut method, Doctor Judd at the Mayo Clinic often did 25 formidable operations between 8 a.m. and 1 p.m., working in two rooms. With the field previously prepared with local anaesthesia, Doctor Adson would do a tic doloreux case in 20 minutes, avoiding the first root. Doctors Deaver and Frazier of Philidelphia and J. M. T. Finney of Baltimore, used methods familiar to me but most of the men in the leading Eastern centers, including Dandy and Cushing, were products of Halstead who was trained by Kocker in Germany. All Halsteadians used the slow, meticulous silk method. This controversy has been happily compromised but was still raging in 1948. That year, Sir Heneage Ogilvie addressed both the Western and the Southern Surgical. I heard him at the Western at Santa Barbara when he opened his talk with this story. He said that he had just come from the East Coast where a surgeon invited him to witness a gall bladder operation at 9 a.m. At twelve noon, he relayed word to the surgeon that he had to leave for a lunch engagement. The surgeon sent back word for Ogilvie to return after lunch to see the finish of the operation. Sir Heneage's talk was about the complications incident to long procedures. The Eastern members were indignant. Many, also members of the Southern, petitioned the Southern to cancel Sr. Heneage's talk the next week.

On our clinical trip I saw Harvey Cushing, Halstead's first chief resident. Cushing was in his prime and his greatness was equalled only by his arrogance. I went with him on his famous Sunday morning rounds. Each sub-head was required to attend. No one, except Cushing, said a word. It was like a royal procession. One patient had a draining thigh wound. Smith Peterson had done an open fixation on a femoral fracture. Cushing said, "Smith, I hope this teaches you not to operate on simple fractures."

Someone told me about a prominent citizen who called Cushing to operate on his wife. She was in the nearby Boston City Hospital. Cushing replied, "You have the wrong man. You need an itinerant surgeon."

Betsy Cushing first married James Roosevelt. After she married John Hay (Jock) Whitney, Mary and I had dinner with the newlyweds at Greentree Farm. Sitting next to Betsy, reminiscing about her father, she said Doctor Cushing never like President Roosevelt and had never met him until the wedding reception. The President, enthroned in his wheelchair, greeted Doctor Cushing in his usual airy manner. "Hellow, Harvey," he said, "I'm gald to see you. I want your opinion on the report of my Wickersham Committee on Hospitals." Doctor Cushing, irritated by the assumed familiarity of the President, replied, as he walked away, "I think the report was outrageous."

We went from Boston to Glasgow to see Mr. Archibald Young who had to wait 40 years for Professor McEwen to die at the age of 94 before he could get the chair. This situation started the forced retirement rule in all schools. In Liverpool, I visited Sir Robert Jones, who came from a long line of Welsh bonesetters. I was shown the original Thomas splint, invented by his uncle, Sir Hugh Owen Thomas. When Sir Robert applied a corrective dressing on a boy with a clubfoot, he told the mother to bring him back once a week. "Why, Sir Robert," she said, "I live a hundred miles away." "Yes," Sir Robert smiled, "It's a beautiful trip, isn't it?"

I saw Lord Berkeley Moynihan in Leeds and Mr. Walton in London. Their work was similar to that of the Mayo Clinic. After all, Dr. W. W. Mayo, father of the Mayo Brothers, migrated from England.

The panel system, the forerunner of the National Health Act, was in effect. I went with one doctor to his Harley Street office where he and his nurse disposed of 50 panel patients in 40 minutes. The doctor then spent two hours with six private patients.

On the Continent, I found the surgery cruder than in England. I was reminded of the remark made by C. H. Mayo, while watching a Paris surgeon work. A visitor next to Doctor Charlie said, "Dr. Mayo, is he not a bold surgeon?" "I don't know," replied Doctor Charlie, "I would have to see the patient awake with just as big a knife."

One of the biggest changes I have observed has been in the discussions of papers. Authors of papers often were called liars or worse. Meetings sometimes ended in fisticuffs. Even national meetings were not free of virulence. In 1922, at the AMA Meeting in Chicago, I heard Henry Plummer of the Mayo Clinic report several hundred goitre cases, preoperatively prepared with Lugol's solution. The mortality was minimal. Doctor Crile was still doing toxic thyroid cases in four stages in the patient's room. Opening the discussion, Doctor Crile was livid. He said the results were impossible. Dr. W. J. Mayo, closing the discussion, paid no attention to Doctor Crile's remarks. He merely said it was always an honor to have Doctor Crile discuss a paper. The example set by W. J. Mayo, Irvin Abell, Mont Reid and others is credited with changing the tone of discussions, especially at surgical meeting.

In my early years, Arthur MacCormack, with power inherited from his father, was in his long-time role as czar of organized medicine in Kentucky. As dual Secretary of the State Board and the Kentucky Medical Association, aided by an efficient assistant, a woman who always accompanied him, Arthur could bestow or withhold a license to practice and he dominated the programs of meetings of the Kentucky State Medical Association. He was all out for Kentucky. As far as I know, no Cincinnati doctor, during his regime, was ever on the program of a state meeting. Doctor Shaw of Campbell County, when President of the Kentucky Medical Association, suggested I give a paper at the next meeting. "No," Arthur told Doctor Shaw, "tell Asbury to get a reputation."

I knew Doctor MacCormack was right but I tried to soften him. In 1930, as program chairman of the Cincinnati Academy of Medicine, I invited him to address the Academy and gave a small dinner for him. I still got no invitation to a state meeting. Arthur himself was a speaker who could bring tears to the eyes of a lay audience when he talked about Ephraim McDowell and Mrs. Crawford.

I know his daughter, Mary MacCormick Wilbur, who died of cancer of the lung in Middleburg, Virginia a few months ago. Her husband, Billy Wilbur, called me recently for advice about setting up a cancer research fund.

The doctors in Covington and Newport exhibited the same chauvinism as Doctor MacCormack. At a time when there were really no trained men in Northern Kentucky, no doctor ever referred a patient to Cincinnati. Having been a student intern at Speers Hospital, I was a half exception. Now and then they asked me to operate on patients in Newport and Covington hospitals but they never sent a case to me across the river.

Arthur MacCormack was the medical law of Kentucky. His father, J. N., was the medical law of the United States. Louisville has had other presidents of the AMA and famous national figures. I knew Doctors Pusey and McMurtry. L. P. Yandell made great contributions. Fred Verhoef, life-long friend of my wife, Mary, was the nation's greatest opthalmologist. Irvin Abell and Glen Spurling were powers in national surgical circles. Some have forgotten that J. N. MacCormack was the all-time most powerful figure

nationally in organized medicine, medical licensure and indirectly in medical education.

J. N. MacCormack **was** the AMA. He put the AMA on its feet and wrote the code of ethics. Kentucky had the first (1906) medical practice act. Doctor MacCormack wrote it. Other states copied it. Under his leadership, the AMA induced the Carnegie Foundation to appoint Simon Flexner of Louisville to investigate all medical schools. The Flexner report spelled the death knell of proprietary schools putting medical education in the neutral atmosphere of universities.

As a native, I am proud of Kentucky's medical heritage and doubly proud to be here tonight.

I assume this honor is due to my age and my current book, Horse Sense and Humor in Kentucky. Surprisingly, several hundred copies of it have been bought in Louisville, one reason I was able to send Berea a sizeable check for the 1981 profits. Age brings a compulsion to write books and to be oracular. An oracle is any old man, 200 miles from home, armed with 100 lantern slides, speaking to a backwoods audience. My trouble is I am only 100 miles from home, have no lantern slides and am speaking to an erudite audience.

I am intimidated. I stand in the home of former greats in the profession. I see Laman Gray and psychiatrists John Schwab and his guest Doctor Kacinovitch which reminds me that a psychiatrist is any doctor who communicates with and relates to his patients. I see prominent citizens such as Helen and Irvin Abell, the Charles Farnsleys, the Sam Millers and others who are continuing the leadership of their ancestors. I see Jim Moss, Art Keeney, Chris Shields and other members of the Innominate Society who are making contemporary history. And I see Mrs. T. Cook Smith, the widow of the man to whom this annual dinner is dedicated. I congratulate the Innominate Society on the development of fine traditions and predict it will add to these traditions in future years.

Now I shall do something the Devil never did—leave you. I end as I ended my book. 'If anyone disagrees with anything I have said, I have this unanswerable non-sequitur:

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Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

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Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

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Brief Musings On Inflation

THE cost of medical care delivery in the United States continues to be a major target of the so-called inflation fighters. Recently reported figures indicate the total cost for medical care increased by 12.5% in 1981. The projected health bill for this year is $285 billion. How should these data be interpreted? Does it mean that health consumers are spending more for the same quality health care received in the past? Or could the quality of care be better than—say five or 10 years ago? If we make the assumption that coronary by-pass surgery, renal dialysis and neonatal intensive care units manifest improved medical care, we might contend that consumers are paying **more** for a **better** product.

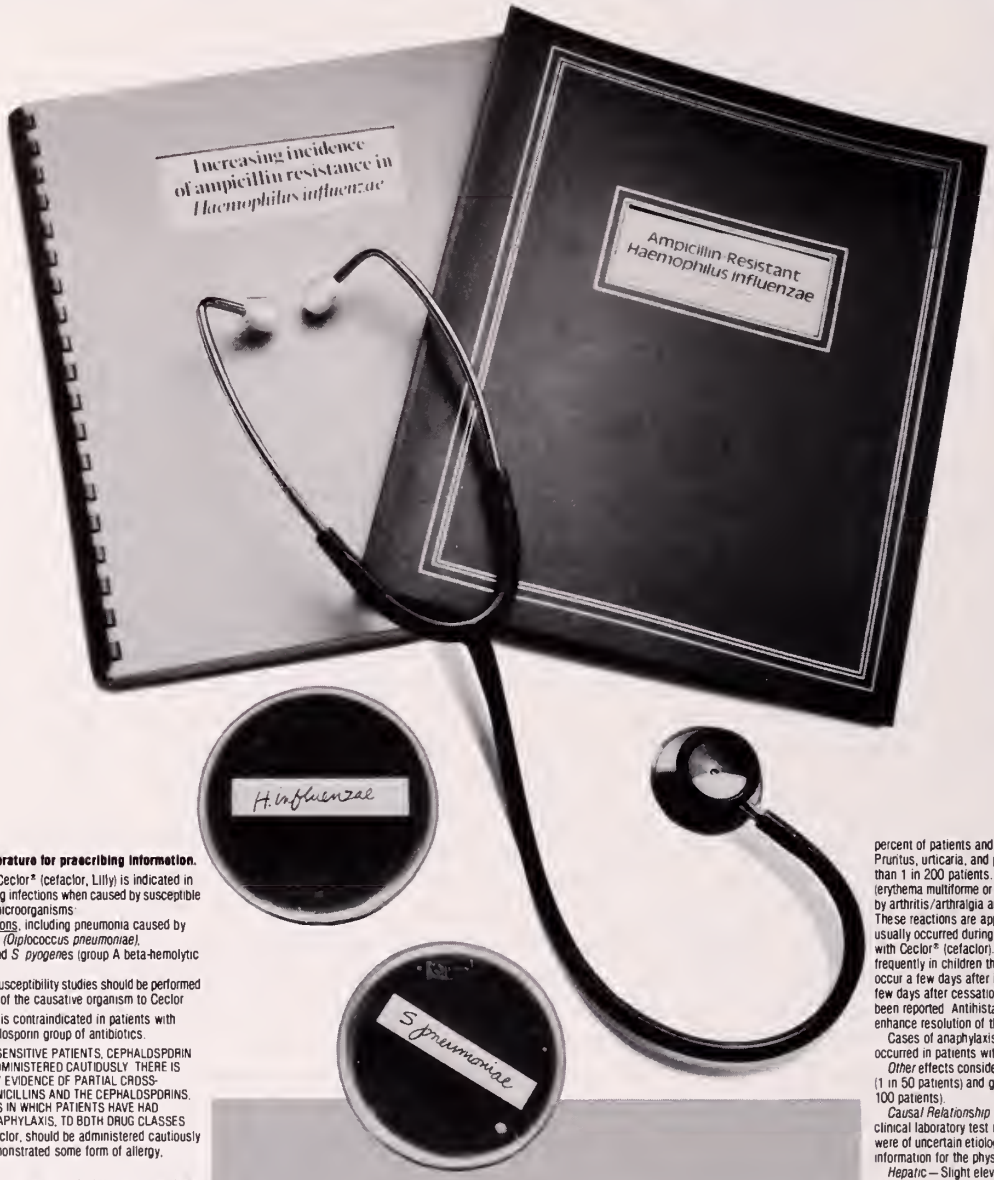
One might attempt to create an analogy between common business practice and medical practice, but it is a difficult if not impossible task. The cost of a black and white television today compares favorably with its cost 15 or 20 years ago; a sophisticated color T.V. is a more expensive item. Today, most health care providers, ideally, strive for **one brand** of health delivery—and this is what is expected. The businessman may simultaneously offer a deluxe brand and a bargain brand, and the consumer may take his choice. What physician is prepared to offer the choice of a deluxe physical exam—with appropriate ancillary tests—or the bargain examination with its discount features?

It is not to say that valid cost containment procedures are not in order. But, if continual improvements are expected, there is a point of irreducible expense. If the time has arrived when this nation cannot afford continual improvements in expensive medical technology, priority decision time is upon us and we may be expected to offer less at a reduced cost.

The per capita annual cost of medical care in the United States exceeds $1,000. In Malawi, a small emerging country in southeastern Africa, the government contribution to health care in 1975 was $1.00 to $1.20 per person.

G. Randolph Schrodt, M.D.

An added complication... in the treatment of bacterial bronchitis*



Some ampicillin-resistant strains of Haemophilus influenzae—a recognized complication of bacterial bronchitis*—are sensitive to treatment with Ceclor.[1-6]

In clinical trials, patients with bacterial bronchitis due to susceptible strains of Streptococcus pneumoniae, H. influenzae, S. pyogenes (group A beta-hemolytic streptococci), or multiple organisms achieved a satisfactory clinical response with Ceclor.[7]

Ceclor®
cefaclor
Pulvules®, 250 and 500 mg

Brief Summary.
Consult the package literature for prescribing information.

Indications and Usage: Ceclor® (cefaclor, Lilly) is indicated in the treatment of the following infections when caused by susceptible strains of the designated microorganisms:

Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs.

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids.

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended.

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). (100281R)

*Many authorities attribute acute infectious exacerbation of chronic bronchitis to either *S. pneumoniae* or *H. influenzae*.[8]

Note: Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

References

1. Antimicrob. Agents Chemother., *8*:91, 1975.
2. Antimicrob. Agents Chemother., *11*:470, 1977.
3. Antimicrob. Agents Chemother., *13*:584, 1978.
4. Antimicrob. Agents Chemother., *12*:490, 1977.
5. Current Chemotherapy (edited by W. Siegenthaler and R. Luthy), II:880. Washington, D.C.: American Society for Microbiology, 1978.
6. Antimicrob. Agents Chemother., *13*:861, 1978.
7. Data on file, Eli Lilly and Company.
8. Principles and Practice of Infectious Diseases (edited by G.L. Mandell, R.G. Douglas, Jr., and J.E. Bennett), p. 487. New York: John Wiley & Sons, 1979.

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

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McDowell House

Auxiliary Reports

October 20th is a special day for the Auxiliary to the Kentucky Medical Association for it is on that day that McDowell House personnel will open the doors of the home of Doctor Ephraim McDowell in Danville, Kentucky to the AKMA. In traveling to the counties since my installation, I have discovered that while most members were aware of the McDowell House, many were not familiar with the history of the physician, of the house and why it is important to Kentucky. Many members have never visited the House and others have not been there since the refurbishing. With this in mind, I contacted Susan Nimocks and Carol Johnson of the McDowell House Staff.

McDowell House is the restored home, apothecary shop and gardens of the pioneer surgeon, Doctor Ephraim McDowell. On Christmas in 1809, Dr. McDowell performed the first successful ovariotomy on Jan Todd Crawford in the second floor bedroom of this house. Because of Doctor McDowell's place in history and as a tribute to the man as well as to the medical profession, the Kentucky Medical Association sought for many years to acquire this house.

In 1939, the KMA realized a dream when the home of Doctor McDowell was dedicated and opened as a state shrine. There was a great deal to be restored at the home and this was accomplished with the assistance of the Works Progress Administration. From 1939 and to the present, the Kentucky Medical Association has contributed the Director's salary as well as to the maintenance of the house. The Auxiliary to the Kentucky Medical Association furnished the house except for the operating room which was furnished and has been maintained by the Colonial Dames of America, Chapter IX, in Kentucky.

The Apothecary Shop was restored in 1959 after four years of work and planning by the pharmacists of the state who adopted this shop as a project. Money was raised by the Kentucky Pharmaceutical Association as well as donations from the Eli Lilly Endowment Fund. Charles Pfizer & Co. as well as J. B. Roerig prersented collections to the shop. The keys to the shop were presented to the Kentucky Medical Association in 1959.

The years took its toll on the McDowell House and in the 70's the Board of Managers requested a grant to make some very necessary repairs. The grant from the Kentucky Heritage Commission was received in 1981, but the amount has been reduced considerably due to the fee charged by an architect.

One of the stipulations of the Commission was that a complete historic structures report be completed by an architect before actual restoration could commence. With this report completed, the work began.

It has taken three years to complete this work with the major part of the renovation completed last year, using the remainder of the grant from the Heritage Commission and money from the House Fund. Work involved in the renovation included painting the exterior of the house, a new wood shingle roof, new guttering, repairing plaster as well as painting the interior, repairing crumbled brick walks and wall, cleaning and sealing brick with silicone, placing handrails on steps, electrical work on overworked circuits, bracing the parlor, library and dining room floors, adding heat in the basement, repairing shutters, benches and steps, repairing a badly damaged back porch floor and placing insulation in a portion of the house.

The Auxiliary also assisted monetarily in the renovation with Jefferson County taking care of all repairs in their room as well as purchasing a period mantle and storm windows; Fayette County also took care of all repairs in the Fayette room as well as providing a period mantle and a new front door to replace one that had deteriorated. The Colonial Dames of America paid for the plastering, painting, etc. in each of their rooms. The AKMA has made contributions for repairs, ultra violet filter paper for all windows to protect the collection, wooden venetian blinds, archival materials, racks for the gift shop, standards to protects the displays and provided for a complete inventory (pictures and descriptions) of the collection. They have placed in the McDowell House approximately $245,000 in furnishings, and other small items not appraised. In the last three years, members have contributed $19,346.81 to the Refurbishing Fund with $5,670.29 donated since last April.

There is much to be done at the McDowell House so that the house can be seen in entirety. The cellar cannot be opened to the public until the basement steps are made safe; this cellar is where Dr. McDowell taught his apprentices anatomy. Dr. Laman Gray, Chairman of the Board of Managers, as well as the rest of the Board, puts safety above all. The goal is to have authentic funishings made before 1830 in every room in the house: new parlor curtains, a Kentucky sideboard, an ingrain carpet for the library, restoration of the Isaac Shelby portrait, oil cloths for the front hall, a Kentucky secretary, period bowls—to name a few. Most of the kitchen utensils are now from 1850-1870 and the Board would like to replace these. All of the above are expensive items and a tremendous amount of money will be needed to purchase them. Mr. James Cogar and Mr. James Thomas have complied a list of the items needed for the house; it is from that list that the Auxiliary works.

The goal is to build an endowment fund to provide money to take care of all repairs—both large and small. With the Federal Government's cancellation of all funds for such projects, the McDowell House must find ways of providing monies for maintaining the house in good repair as well as acquiring period furnishings to replace that which had been placed in the house originally. When the endowment fund becomes large enough, the interest should take care of all repairs.

Visitors are given a guided tour throughout the McDowell House and furnishings of the period (1770-1830) are shown. The McDowell House Staff hopes that if you have not visited the house, you will do so. If you have not been in the last year, you will be very pleased to see all of the work that has been done and the new acquisitions. The house is at 125-127 S. Second Street, Danville, Kentucky, right across from the Square. Spend the day with the Auxiliary on the 20th of October or visit the house on your own—you will be proud of what has been accomplished in the last three years. Dr. McDowell is a part of Kentucky history, medical history and this house is his monument.

Ellen C. Sklar (Mrs. Allen), President
Auxiliary to the Kentucky Medical Association

LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

A 55-year-old, white, unmarried, female has been a patient of mine since 1952 at which time she was treated for Pityriasis Rosea. This resolved and disappeared over a three-week period, and she was not seen again for 20 years at age 45. This patient has worked at Proctor and Gamble during that entire time. In 1975, at age 49, this lady noted she had some swelling in both her hands and left leg. This was thought to be Scleroderma and six weeks later she was re-examined and given a complete physical.

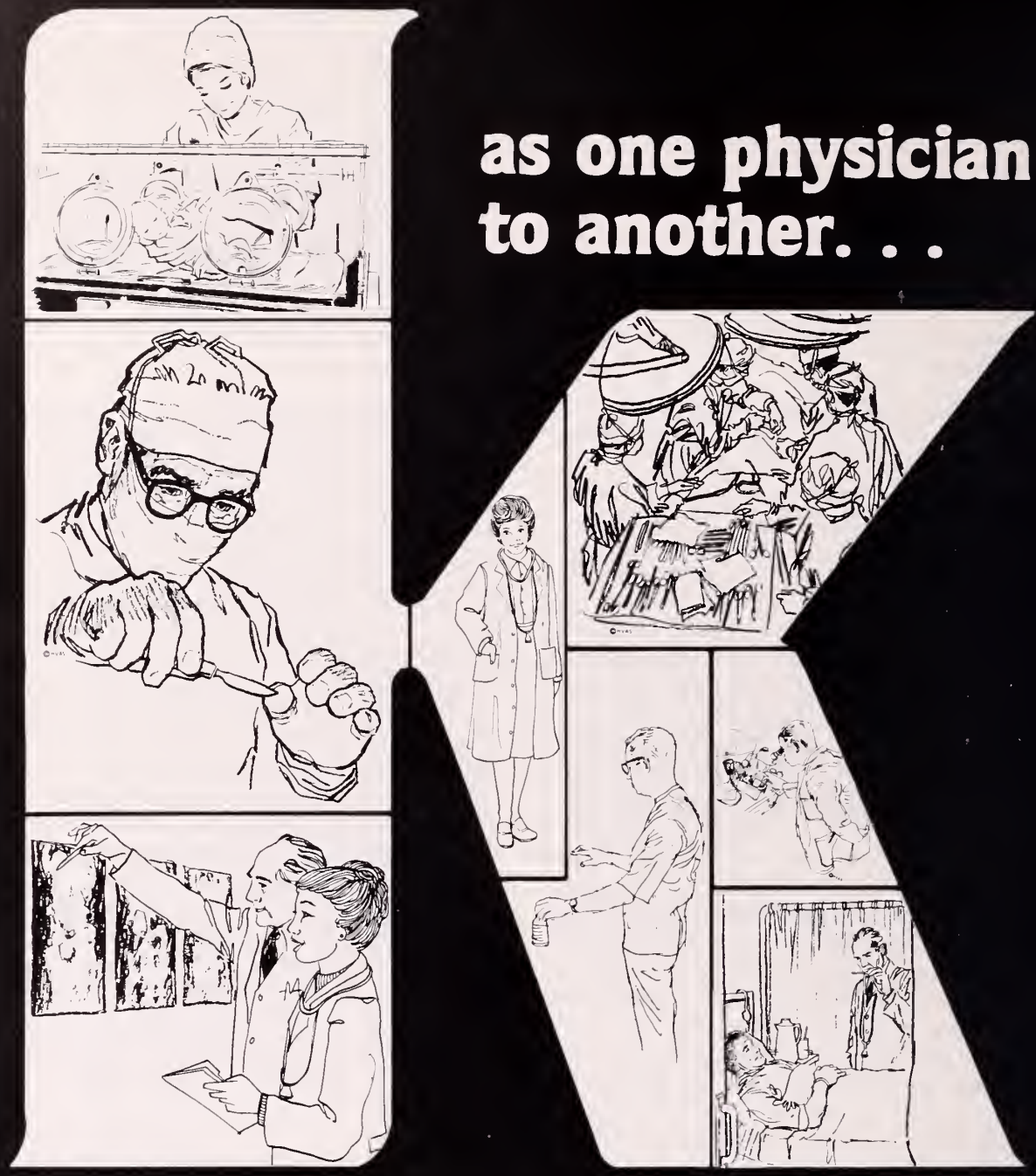
Her chief complaint was a Raynuad's reaction in her fingers and hands, and a diagnosis of Scleroderma by physical examination was reinforced. In July 1975, she was fitted with elastic sleeves. In August 1975, the hardening of the arms was only questionably improved, and the fingers were possibly made worse by the sleeve action. Lab tests remained normal, sed rate and CBC remained normal. She was seen routinely over the next seven years, during which time her fingers became more and more blanched and more and more contracted. The joint of the extensor surface of the fingers developed various ulcerations.

Her face became very mask-like. She developed much difficulty in swallowing and despite the use of Reserpine and the recommended drugs, she was helped only by one to two yearly trips to Florida and much sun bathing. On May 19, 1982, she was treated with Nifedipine and was able to tolerate, before nausea and vomiting, two 10 mg. tablets Tid. One month later June 23, 1982, there seemed to be a very recognizable softening of the arms and face. For the first time in years, the patient had started perspiring and was feeling tingling in her fingers.

On July 20, 1982, after one more month, the patient had regained the ability to perspire to a much greater extent. The improvement of the hardness of her arm was noticeable to the medical personnel taking her blood pressure in the office. The veins of the upper extremities, including her hands, had become visible. The face had undergone marked softening, the mask-like appearance was reduced, and for the first time wrinkling of the skin was noted. The office personnel were no longer afraid and apprehensive at taking her blood pressure, where previously they had been frightened of bursting her skin.

Although, this is only a two month therapy, it has reduced the typical Scleroderma hardness and induration in all areas, has permitted the skin to perspire, has permitted the visualization of veins in the skin, and has increased sensory perception in the fingers, as well as permitting her to show expression in her face including the ability to smile.

Edgar B. Morgan, M.D.
Louisville, Kentucky 40206



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Stephen Z. Smith, M.D.
Assistant Scientific Editor

BOOK REVIEWS

REVIEW OF MEDICAL MICROBIOLOGY, 15th EDITION
E. Jawetz, J.L. Melnick and E.A. Adelberg

Lange Medical Publications, 1982, 553 pages

The Lange series on Medical Microbiology is a must for the student of medicine, whether officially being schooled or perpetuating his already begotten education. Evolving with each day this field has in its confines, a broad spectrum of the living world. Perhaps no field has such general importance, from the prophylaxis and treatment of common diseases to the study of the invasion of new predators.

The authors formed a triumvirate to cover the subject matter, thereby diffusing their talents and biases over the course of the book. This family authorship facilitates an even style, a non-redundant presentation and perhaps an "interesting" microbiology book. The two years that have passed since the previous 14th Edition was constructed have not appreciably altered the basic contents or organization of the book. The references are updated and sagely chosen, and the immunization recommendations are delineated.

The early chapters are basic science grist, with sophisticated chemistry and biology emphasized. Even ecological requirements are explained. Illustrations are clear, but drawings are more clear and helpful, despite the usual clinical Rubric's cube.

Each organism category is then discussed. There is perhaps a disporportionate amount of space dedicated to the viruses. This probably reflects Dr. Jawetz's area of expertise, but with the world shrinking and the war embers glowing, it would seem appropriate to emphasize the viruses. Sections are introduced with a brief anatomical description, a cursory coverage of each organisms unique biology and then onto the pathology. Pathogenesis, clinical findings, laboratory diagnosis, epidemiology and control are discussed. This facilitates using the book as a reference.

The concluding chapter on parisitology assumes its typical role of stepchild, being appended to the end of the book and even having a separate author. Nevertheless, exquisite hand drawings and helpful accessible tables make this chapter a fitting epilogue.

No onerous appendix awaits at the conclusion of the book, only a finitely detailed index. A primer and a reference, this book is a good buy.

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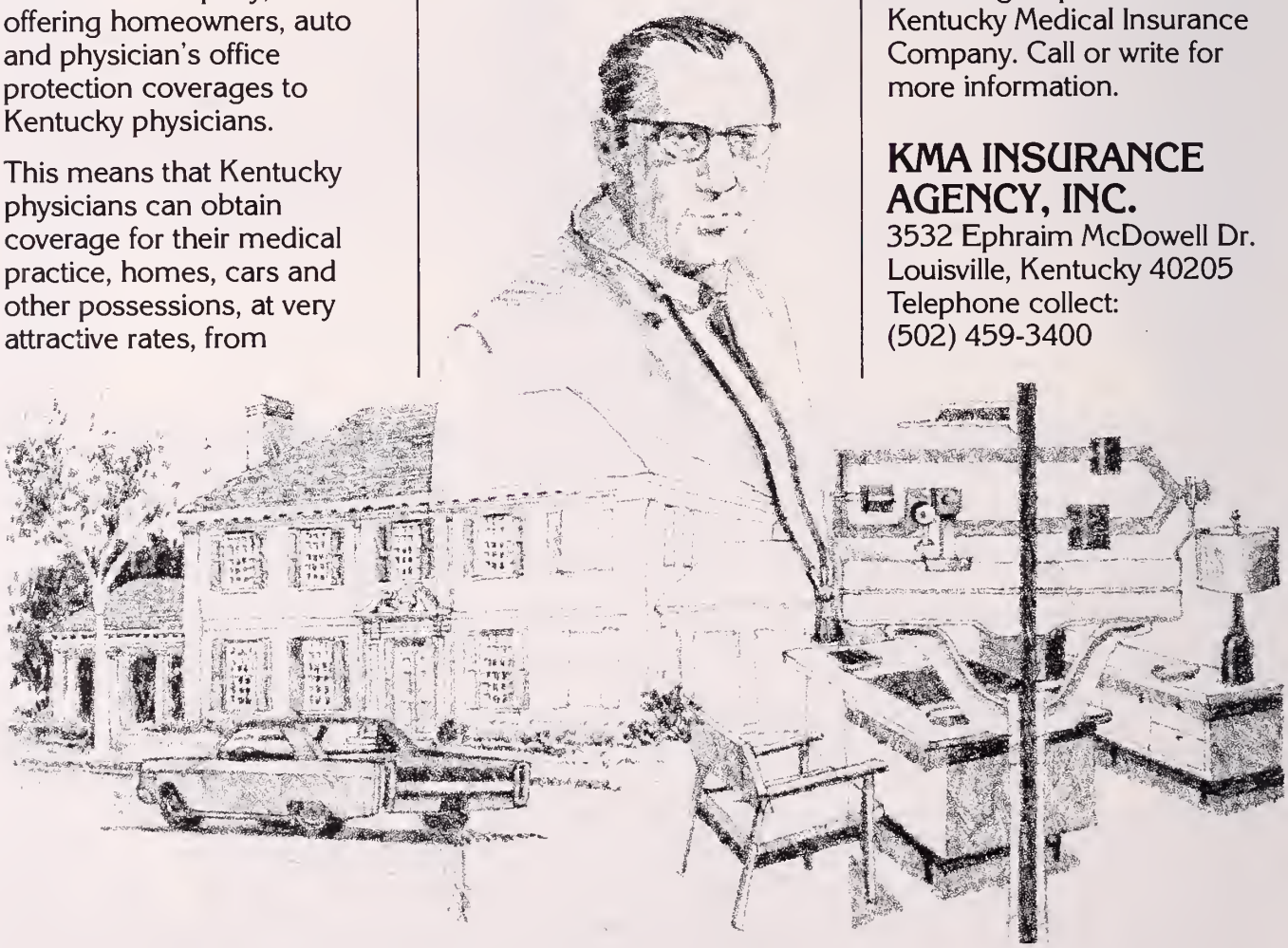
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Digest of Proceedings August 11-12, 1982, Meeting of the KMA Board of Trustees

The KMA Board of Trustees met in regular session on Wednesday and Thursday, August 11-12, at the KMA Headquarters Office in Louisville. A primary purpose of the August meeting is to review the reports of the committees to be presented to the House of Delegates.

The Board accepted reports of the President; Secretary-Treasurer; Secretary, Board of Medical Licensure; Auxiliary President; KPRO President; Delegate to the AMA; and representative of the Department for Human Resources.

The Board expressed appreciation to Frank M. Gaines, M.D., Secretary of the Board of Medical Licensure, and directed that a letter of support be written to the Licensure Board President commending the Board's recent activities and hiring of additional investigators.

The Board suggested nominees for appointment to the UK Tobacco and Research Board; appointed an Associate Editor to the Journal Editorial Board; and named a new KEMPAC Director. The Board members expressed deep concern and reservation about the Citicare Program being proposed for the indigent in Jefferson County and offered its assistance to the Jefferson County Medical Society should opposition to the plan be indicated.

The name of Thomas L. Heavern, Jr., M.D., Highland Heights, was submitted to the AMA for consideration of the AMA's Special Award in Recognition of the Year of the Disabled.

Staff was directed to review the Association's current policy on midwifery; and to meet with President-Elect Blackburn to finalize plans for the 1983 KMA Leadership Conference.

Payment from Legal Trust Fund of a legal fee incurred in Fayette County in a peer review suit was authorized; amid the Board recommended to the KMA Insurance Agency, Inc. Board of Directors that it proceed with plans for the 10,000 square foot addition to the Headquarters Building.

The Board also recommended to the Agency Board that it spend up to $5,000 to investigate the establishment of a KMA Physician Financial Institute to provide financial services to physicians. Within the same concept, the Board endorsed the formation of a holding company to investigate setting up additional companies (automobile leasing, computer services, etc.) to serve KMA members, and asked for approval by the House of Delegates.

The Board members passed a special Resolution in recognition of 20 years of service to the Association by its Executive Vice President, Robert G. Cox.

The next meeting of the Board will be held in conjunction with the 1982 Annual Meeting in Lexington.

Conference Addresses Issues of Health Care Costs

The Governor's Coalition of Payors to Address Health Care Costs sponsored a two-day program in Frankfort, June 21-22. The Conference brought together speakers with widely varying opinions as to what actions are indicated to control the rise of health costs. Walter I. Hume, Jr., M.D., Louisville, Chairman of KMA's Health Cost Committee, was the only physician to address the conference and reminded the audience, made up of mostly business and government officials, that many of the health problems brought to physicians are lifestyle related. Thus, if the public really wants to hold down costs, individuals must take more responsibility for their own well being.

Although most speakers agreed that there is no quick fix for the health cost problem, there was little concensus as to the best approach for addressing the issue.

DHR Secretary, Grady Stumbo, M.D., concluded the program with a caustic speech in which he indicated that the real purpose of the Governor's Coalition was to foster legislation targeted for the next session of the General Assembly. He stated that businessmen could put a value on a janitor, department head or executive, but probably had a hard time judging "what a doctor is worth." He told the group that neither government, insurance companies nor providers were working in their best interests.

Coalition subgroups, none with providers, have been formed to develop recommendations on promoting individual cost responsibility; state regulatory reform; health insurance management and health care delivery reform.

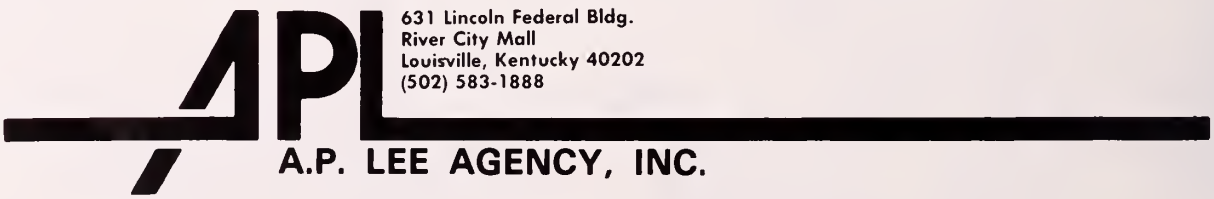
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IN MEMORIAM

WILLIAM JAMES ASHBROOK, JR., M.D.
1933-1982

William James Ashbrook, Jr., M.D., a Louisville surgeon, died July 28 at Suburban Hospital. Doctor Ashbrook graudated from the University of Louisville in 1959. He had been a member of KMA since 1969 as well as a member of the Ohio Valley Proctologic Society, Louisville Surgical Society, American Medical Association and the Jefferson County Medical Society.

ROBERTSON O. JOPLIN, M.D.
1902-1982

Robertson O. Joplin, M.D., former president of the Jefferson County Medical Society, died August 22 at St. Anthony Hospital, Louisville. Doctor Joplin, a 1927 graduate of the University of Louisville Medical Department, was a general surgeon and had practiced for 55 years. In addition to being a past president of the Louisville Surgical Society and the Kentucky chapter of the American College of Chest Physicians, Doctor Joplin was a member of the American Medical Association, the Jefferson County Medical Society and had been a member of KMA since 1952.

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Postgraduate Opportunities

NOVEMBER

3 Wayne State University School of Medicine, 22nd Annual Thyroid Workshop, Gordon H. Scott Hall of Basic Medical Sciences, Detroit, Michigan

2 Anorexia Nervosa: Causes and Cures, The Division of Adolescent Medicine, Long Island Jewish-Hillside Medical Center, New Hyde Park, NY

4-6 *Recent Advances in the Diagnosis & Therapy of Common Endocrine Problems:* New Orleans, LA. INFO: Registrar, American College of Physicians, 4200 Pine St., Philadelphia, PA 19104.

5-6 Cincinnati Conference on Cancer—Breast Cancer, Bethesda Hospital and Deaconess Association, The Westin Hotel, At Fountain Square, Cincinnati, OH

5-6 International Medical Education Corporation, Cardiac Rehabilitation, Hyatt Lincolnwood, Chicago, IL

12-14 East Tennessee State University, Cardiology in the Aging, Johnson City, TN

13 "The Elderly Patient and the Hospital Experience", Bethesda Hospital & Deaconess Assoc., The Terrace Hilton Hotel, 15, West Sixth Street, Cincinnati, OH

16-17 East Tennessee State University, Ellis Orthopaedic Lectureship, Johnson City, TN

18-20 Wayne State University School of Medicine, Acute Injuries of the Hand, Primary and Definitive Care, The Westin Hotel, Renaissance Center, Detroit, Michigan

18-20 Washington University School of Medicine in St. Louis & American Academy of Allergy & Immunology, "Clinical Allergy for the Practicing Physician." Washington University School of Medicine, St. Louis.

20 Wayne State University Schools of Medicine and Law, "Surrogate Mother Symposium, McGregor Memorial Conference Center, Detroit, MI

26-30 Wayne State University School of Medicine, Ophthalmology: Basic and Clinical Review, Hyatt Regency Dearborn, Dearborn, Michigan

DECEMBER

3-4 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hilton Plaza Center, Kansas City, MO

3-5 International Medical Education Corporation, Ambulatory Electrocardiography: Clinical Applications, Methodology & Interpretation, Hyatt Regency, Chicago, IL

JANUARY

East Tennessee State University, Forensic Medicine, Johnson City, TN

8-14 Steamboat Springs, Colorado, Current Concepts in Pain Management. INFO: D. Berman, M.D., Program Director Current Concept Seminars, 3301 Johnson Street, Hollywood, FL 33021

20-30 Winter Congress International Body Imaging Conference, St. Moritz, Switzerland

31-4 Digital Radiography 1983 National Symposium, The Diplomat Resort & Country Clubs, Hollywood, Florida

FEBRUARY

East Tennessee State University, School Health V, Johnson City, TN

23-1 Hurly Medical Center, Adolescent/Young Adult Medicine, Wailea Beach Hotel, Maui, Hawaii

28-4 Steamboat Springs, Colorado, Current Concepts in Pain Management. INFO: D. Berman, M.D., Program Director Current Concept Seminars, 3301 Johnson Street, Hollywood, FL 33021

28-4 Annual Meeting of the United States—Canadian Division of the International Academy of Pathology, Atlanta Hilton, Atlanta, GA

MARCH

1-4 The University of Texas System Cancer Center, "Cancer Invasion and Metastasis, 36th Annual Symposium on Fundamental Cancer Research, Shamrock Hilton Hotel, Houston, TX

East Tennessee State University, Mental Retardation V, Johnson City, TN

20-24 32nd Annual Scientific Session of American College of Cardiology, New Orleans, LA

APRIL

East Tennessee State University, Orthopaedic Operating Room Nurses: Implants and Instrumentation Techniques, Johnson City, TN

18-29 24th Postgraduate Institute for Pathologists in Clinical Cytopathology, The Johns Hopkins University School of Medicine, Baltimore, MD



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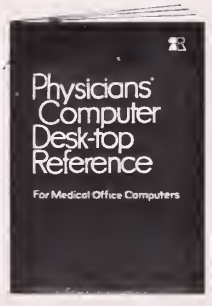
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*Pharmacokinetics cannot as yet be directly related to efficacy.
†All benzodiazepines produce additive effects when given with CNS depressants such as barbiturates or alcohol.

See important information on following page.

Ativan® for (lorazepam) IV Anxiety

Brief Summary of Prescribing Information.

Indications and Usage: Management of anxiety disorders or short-term relief of symptoms of anxiety or anxiety associated with depressive symptoms. Anxiety or tension associated with stress of everyday life usually does not require treatment with an anxiolytic.

Effectiveness in long-term use, i.e., more than 4 months, has not been assessed by systematic clinical studies. Reassess periodically usefulness of the drug for the individual patient

Contraindications: Known sensitivity to benzodiazepines or acute narrow-angle glaucoma.

Warnings: Not recommended in primary depressive disorders or psychoses. As with all CNS-acting drugs, warn patients not to operate machinery or motor vehicles, and of diminished tolerance for alcohol and other CNS depressants.

Physical and Psychological Dependence: Withdrawal symptoms like those noted with barbiturates and alcohol have occurred following abrupt discontinuance of benzodiazepines (including convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Addiction-prone individuals, e.g. drug addicts and alcoholics, should be under careful surveillance when on benzodiazepines because of their predisposition to habituation and dependence. Withdrawal symptoms have also been reported following abrupt discontinuance of benzodiazepines taken continuously at therapeutic levels for several months.

Precautions: In depression accompanying anxiety, consider possibility for suicide.

For elderly or debilitated patients, initial daily dosage should not exceed 2mg to avoid oversedation. Terminate dosage gradually since abrupt withdrawal of any antianxiety agent may result in symptoms like those being treated: anxiety, agitation, irritability, tension, insomnia and occasional convulsions. Observe usual precautions with impaired renal or hepatic function. Where gastrointestinal or cardiovascular disorders coexist with anxiety, note that lorazepam has not been shown of significant benefit in treating gastrointestinal or cardiovascular component. Esophageal dilation occurred in rats treated with lorazepam for more than 1 year at 6mg/kg/day. No effect dose was 1.25mg/kg/day (about 6 times maximum human therapeutic dose of 10mg/day). Effect was reversible only when treatment was withdrawn within 2 months of first observation. Clinical significance is unknown; but use of lorazepam for prolonged periods and in geriatrics requires caution and frequent monitoring for symptoms of upper G.I. disease. Safety and effectiveness in children under 12 years have not been established.

ESSENTIAL LABORATORY TESTS: Some patients have developed leukopenia; some have had elevations of LDH. As with other benzodiazepines, periodic blood counts and liver function tests are recommended during long-term therapy

CLINICALLY SIGNIFICANT DRUG INTERACTIONS: Benzodiazepines produce CNS depressant effects when administered with such medications as barbiturates or alcohol.

CARCINOGENESIS AND MUTAGENESIS: No evidence of carcinogenic potential emerged in rats during an 18-month study. No studies regarding mutagenesis have been performed

PREGNANCY: Reproductive studies were performed in mice, rats, and 2 strains of rabbits. Occasional anomalies (reduction of tarsals, tibia, metatarsals, malrotated limbs, gastroschisis, malformed skull and microphthalmia) were seen in drug-treated rabbits without relationship to dosage. Although all these anomalies were not present in the concurrent control group, they have been reported to occur randomly in historical controls. At 40mg/kg and higher, there was evidence of fetal resorption and increased fetal loss in rabbits which was not seen at lower doses. Clinical significance of these findings is not known. However, increased risk of congenital malformations associated with use of minor tranquilizers (chlordiazepoxide, diazepam and meprobamate) during first trimester of pregnancy has been suggested in several studies. Because use of these drugs is rarely a matter of urgency, use of lorazepam during this period should almost always be avoided. Possibility that a woman of child-bearing potential may be pregnant at institution of therapy should be considered. Advise patients if they become pregnant to communicate with their physician about desirability of discontinuing the drug. In humans, blood levels from umbilical cord blood indicate placental transfer of lorazepam and its glucuronide.

NURSING MOTHERS: It is not known if oral lorazepam is excreted in human milk like other benzodiazepines. As a general rule, nursing should not be undertaken while on a drug since many drugs are excreted in milk

Adverse Reactions, if they occur, are usually observed at beginning of therapy and generally disappear on continued medication or on decreasing dose. In a sample of about 3,500 anxious patients, most frequent adverse reaction is sedation (15.9%), followed by dizziness (6.9%), weakness (4.2%) and unsteadiness (3.4%). Less frequent are disorientation, depression, nausea, change in appetite, headache, sleep disturbance, agitation, dermatological symptoms, eye function disturbance, various gastrointestinal symptoms and autonomic manifestations. Incidence of sedation and unsteadiness increased with age. Small decreases in blood pressure have been noted but are not clinically significant, probably being related to relief of anxiety.

Overdosage: In management of overdosage with any drug, bear in mind multiple agents may have been taken. Manifestations of overdosage include somnolence, confusion and coma. Induce vomiting and/or undertake gastric lavage followed by general supportive care, monitoring vital signs and close observation. Hypotension, though unlikely, usually may be controlled with Levarterenol Bitartrate Injection U.S.P. Usefulness of dialysis has not been determined.

Ativan®
for (lorazepam)®
Anxiety

Dosage: **Individualize for maximum beneficial effects. Increase dose gradually when needed, giving higher evening dose before increasing daytime doses. Anxiety, usually 2-3mg/day given b.i.d. or t.i.d.; dosage may vary from 1 to 10mg/day in divided doses. For elderly or debilitated, initially 1-2mg/day; insomnia due to anxiety or transient situational stress, 2-4mg h.s.**

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PRESIDENT'S PAGE



Universal access to high quality medical care served as a dominant political theme during the 60's and 70's. Hang the cost, remove the barriers, but provide the facilities, technology, equipment and personnel to make the impossible dream possible. When conservative forces urged fiscal restraint and accountability, liberal groups upbraided them, labeling their expression of caution as nothing more than obstructions and self-interest.

New hospitals and nursing homes appeared overnight as monuments to "The New Frontier" and "The Great Society." Hill-Burton became a byword and "matching funds" were the order of the day. Chemists, engineers, scientists and medical researchers, opened the doors to a new era in medical technology. Medical, nursing, and other health educational institutions expanded and opened their doors to more students. Unlimited scholarships and research grants with little or no restraints were commonplace. With the advent of Medicare and Medicaid various provider groups scrambled for reimbursement and expansion of their practice acts.

Basic medical care was passe, with health coverage ranging from taxi cabs to social workers, part and parcel of the benefit package. Suddenly, without warning, the bills came in. Government was awash with budget deficits almost incomprehendable to the average citizen. Like rats fleeing from a sinking ship, the bureaucrats, politicians and news media searched for a scapegoat. Rather than accept equal responsibility, and search for mutual and equitable solutions, they unloaded their big guns at the health care providers. Physicians, hospitals, nursing homes and health insurance companies were easy targets for the fusillade of criticisms and charges of fraud and waste.

Providers and payors recoiled, unable to comprehend the criticism for doing the job for which they had been trained and were responsible for implementing. The rallying cry from those who had championed a utopia of health care now became the focus on which a quick decision had to be made. Ten cents of every dollar generated in America is budgeted to provide health care for our citizens.

It is not the purpose of this article to expose and castigate those who created the climate in which we live. Nor shall this article rehash the warning and concerns we initially held as the system was being turned upside down. The real question every American must ask himself is quite rudimentary. What is the value of human life and good health? Is the intrisic value of health to the total composition of human life worth 10% of our income? If not, what or who do we sacrifice? Shall we develop a scale of one to 10 for the patients receiving neonatal, intensive and nursing home care? Should we incarcerate smokers, alcoholics and those who travel without seat restraints? Should we cease transplant and implant surgery and consider force dieting for those who are obese? Finally, should we revert to separate levels of care dependent upon one's income and position in the society, similar to England and those nations with National Health Insurance? The answers to all of these questions is a resounding no!

Comparisons of health care to other goods and services is no more valid than comparing apples and oranges. New technology and the development of drugs and equipment are not developed in a manner to be retooled, reconstituted or sold at going-out-of-business or fire sales. The market place for out of date health supplies is non-existent. Today's CT scanners are tomorrow's museum pieces.

Unrelentingly, the critics, the planners, and the bureaucrats continue their attack. On one hand they preach planning to restrict growth and accessibility,

while on the other hand criticize the provider for not making health care more accessible and of high quality. The slick facade that sells papers, T.V. revenue and gains support of an uninformed public is a cancer eating its own with a ravishing appetite.

But where does all this leave the providers of health care. Our task is not easy. The road to understanding is rocky. In our aloofness and lack of urgency we have failed to tell our story to our patients. We must begin to tell our success story at every opportunity, public or private, and make allies of our patients. We must get involved in the political process on an unparalleled level as never before. At some point the gloves have to be taken off and we, together, must become protectors, not only for our profession and an unequaled health system, but for those we care about the most, our patients.

This is not to say that health costs should not be studied and adjustments made to reduce the increasing costs of health care. It is encumbent upon each of us to carefully scrutinize our patients length to stay and hold down our professional charges as much as possible. For years, many of us have participated along with third parties, industry and labor to seek a handle on the health care dilimma. Stridency by some of our ultraconservative peers, gut reacting to any proposal or alternative, hindered our effectivenss and accessibility to understanding.

Compounding these problems was the recent action of the Governor in appointing a coalition of payors to address health care costs. The coalition, devoid of providers, only widens the gap to understanding and serves no useful purpose in the dialogue and ultimate solution to health costs.

The saving grace for the dilemma in which we find ourselves is the inordinate and indomitable spirit of the American people. They have a great gift in their ability to separate and distinguish the wheat from the chaff, the political rhetoric and basic truth. Retrenchment in medical care and acceptance of government control in determining individual health and medical needs are unacceptable to most Americans. Our course in health care has been drawn and charted. Second-class medical care and the status quo are not concepts which we readily accept. So long as health care costs are at parity with food, utilities, housing and recreation, the public may grumble and complain, but will never sacrifice the very basic necessity of life—their health. We do not question the necessity of those other items, but simply pose the question: "Is 10% of your dollar too much to pay for the most valuable gift we have—life?"

Dwight L. Blackburn, M.D.
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SCIENTIFIC

Child Abuse and Neglect Research

SUZANNE M. O'DONNELL, R.N., M.ED., SOFIA M. FRANCO, M.D., BILLY F. ANDREWS, M.D. AND CAROL A. O'CONNOR, PH.D.

One hundred fifty five children, registrants of the Children and Youth Project's Center for High Risk Children, were included in a study designed to identify factors that might indicate the potential for abuse and/or neglect in this population. A retrospective review of records was conducted and correlations of five factors were obtained, using the standard Chi-square. Low birthweight, maternal age at the time of the infants birth and socially deviant behavior were the most significant factors.

THE problem of child abuse and neglect has become a major concern of our society. Kempe[1] estimates there are 250-300 child abuse cases per one million children in this country and the National Center on Child Abuse states that 1.5 million children are abused every year in the United States.[2] Abuse and neglect occur among all groups of society but the lower socio-economic groups tend to be over-represented in most studies of child abuse.[3] There is reason to believe that socio-economically deprived families may be more vulnerable for child abuse and neglect because of environmental stresses, such as overcrowding and lack of financial resources.[4] The etiology of abuse and neglect has been explored in numerous reports and many associated factors have been identified. Among these risk factors, low socio-economic status characterizes the majority of the client population at the Children and Youth Project's Center for High Risk Children located in Louisville, Kentucky. The purpose of this study was to identify risk factors that appear to be significantly related to abuse/neglect in this client population, composed entirely of children at high risk from birth for medical and socio-economic reasons and to plan intervention strategies for primary prevention of abuse and/or neglect. Health professionals need no longer wait until injuries or neglect occur to intervene. Families at risk for abuse can be identified and helpful intervention strategies can be implemented to decrease the number of abused and/or neglected children.[5]

From the Children and Youth Project, Department of Pediatrics, University of Louisville, Louisville, Ky

Materials and Methods

In January 1979, the Children and Youth Project of the Department of Pediatrics, a Comprehensive Health Care Center, had 3,000 active participants composed of three high risk patient groups: (1) premature or low birth weight (35%); (2) medical high risk including medical problems of child and of mother (44%); and (3) socio-economically high risk, that is, child and parent living in a designated poverty area with inadequate housing and limited availability of medical care (21%).

A retrospective review of our records was undertaken to identify cases of child abuse and/or neglect. For the purposes of this study, an abused or neglected child is defined in keeping with the Kentucky Statute on child abuse which reads: "Abused or neglected child means a child whose health or welfare is harmed or threatened with harm when his parents, guardian or any other person inflicts or allows to be inflicted upon the child physical or mental injury by other than accidental means; creates or allows to be created a risk of physical or mental injury to the child by other than accidental means; commits or allows to be committed an act of sexual abuse on the child; willfully abandons or exploits such child; does not provide the child with adequate care and supervision, food, clothing, shelter, education or medical care necessary for the child's well being."[6]

Using this guideline 79 confirmed cases of child abuse and/or neglect were identified. Seventy six patients randomly selected from our general patient population served as the control group. Age at the time of first abuse/neglect, race and sex distribution as well as the type of abuse and/or neglect were recorded. Records were also reviewed for factors previously identified by Goldson, Jones and others as related to child abuse, particularly those that are more readily identifiable at or shortly after birth.[7-8] These factors were (a) condition of the infant at birth (Apgar score); (b) birth weight; (c) maternal age at the time of infant's birth; (d) maternal marital status; (e) socially deviant behavior of the parent(s). The standard Chi-Square test was used for statistical analysis. Using this method, the smaller the p-value the more likely it is that the particular factor is related to child abuse/neglect in our patient population.

Results and Discussion

Age and sex distribution were comparable in both abuse/neglect and control groups. In the abuse/neglect group 49% of the children were non-caucasian and 51% were caucasian. In the control group 66% were non-caucasian and 34% were caucasian. This distribution shows a significant prevalence of caucasians in the abuse group, considering the fact that the majority (71%) of the entire client population was non-caucasian. Our non-caucasian population has more single parent families than our caucasian population and these single parent families are most often life-long residents of the area and tended to have an extended family (parents, grandparents and siblings) and life-long friends. We can only speculate that this existing support system among the non-caucasian patient population operates to help prevent abuse/neglect. This finding needs further investigation in our population.

When the age of the patient at the time that abuse or neglect was first observed or reported was examined, 39% (31) in the abuse/neglect group were less than one year of age, 42% (32) were between one and three years old and 21% (16) were greater than three years of age. Review of earlier studies indicated that children less than three were more frequently abused, but current literature indicates the age of the child has increased considerably in the past decade.[9] Since 79% of the children in our study were less than three years of age at the time of abuse or neglect, early intervention appears to be an extremely important aspect of any prevention program for our population.

The types of abuse or neglect that occurred in these 79 confirmed cases were: physical abuse in seven children (9%), inadequate care in nine (11%) and neglect of medical care in three (4%). Sixty children (76%) suffered from a combination of these factors. Inadequate care and neglect of medical care were most frequently coupled in those 60 children. Few studies appear to consider the type of abuse or neglect, although one

such study does state that caucasians more commonly perpetrated physical abuse upon their children, while non-caucasians were more commonly found to neglect their children.[10] We feel that the low figure for physical abuse alone was significant. Other factors, such as inadequate care and lack of medical care, and the combination of these factors, which are more subtle, are on-going and are elements that if dealt with early in the potentially abusive family unit can be corrected with timely and consistent intervention by the health team.

The condition of the infant at birth was assessed from the recorded Apgar Scores. A one minute Apgar Score of six or greater than six was noted in 68 children in the abuse/neglect group and in 72 children in the control group. An Apgar Score of five or less than five was recorded in 11 children in the abuse/neglect group and four children in the control group. The difference ($p = <0.07$) was not statistically significant. Thus, based on our sample of 155 children, the Apgar Score does not appear to serve to distinguish potential abuse or neglect cases in our population. Apgar Scores appear to be more relevant to neo-natal morbidity than to other factors.[11]

The difference in birth weight between the two groups studied showed the most statistical significance ($p = <0.01$). (Table II). Birth weight in the abuse/neglect group and control group was quite similar in infants weighing more than five pounds, but in those infants weighing less than five pounds the difference was obvious. The subject of birth weight and its relevance to abuse/neglect and to other factors such as development and IQ scores has been explored in the literature.[12,13] In one prospective study a significant number of premature infants were abused or neglected in the first year of life.[14] It has been well documented that separation of the infant from the mother, which occurs for longer periods of time in the premature or low birthweight neonate, may negatively affect the maternal-infant bonding process.[15] Based on our findings, a birthweight of less than five pounds may serve as a useful predictor of abuse/neglect in our client population.

The age of the mother at the time of the infant's birth was recorded in our study. A young mother is defined as "at risk" by our Project if she is less than 15 years of age at the time of the birth of her infant. Teen-age mothers are known to give birth to a significantly greater number of premature or low birthweight infants, so there is a correlation between age of the mother and birthweight.[16] In the age group 15 or less than 15 years, there were 12 mothers in the abuse/neglect group and six in the control group. In the age group over 30 years, there were eight mothers in the abuse/neglect group and two in the control group. Combining these two age groups together, it appears that these age groups may have a higher potential for abuse/neglect in our population. ($p = <0.04$) (Table III)

Table IV shows the marital status of both study groups. In the abuse/neglect group 42 mothers were single, 25 mothers were married and 12 were separated. In the control group 49 were single, 24 married and three were separated. The

TABLE I
APGAR SCORES

	ABUSE/NEGLECT (79)	CONTROL (76)
6 or >	68	72
5 or <	11	4
p = <0.07		

TABLE II
BIRTH WEIGHT DISTRIBUTION

BIRTH WEIGHT	ABUSE/NEGLECT (79)	CONTROL (76)
5 lbs. or less	34	18
> 5 lbs.	45	58
p = <0.01		

TABLE III
MATERNAL AGE AT TIME OF BIRTH

	ABUSE/NEGLECT (79)	CONTROL (76)
<15 or >30 years	20	8
16 to 30 years	59	68
p = <0.04		

TABLE IV
MARITAL STATUS

	ABUSE/NEGLECT (79)	CONTROL (76)
SINGLE	42	49
MARRIED	25	24
SEPARATED	12	3
p = <0.1		

TABLE V
PARENTS' SOCIALLY DEVIANT BEHAVIOR

	ABUSE/NEGLECT (104)		CONTROL (100)	
	Number	%	Number	%
ALCOHOLISM	21	20%	0	-
DRUG ABUSE	13	12.5%	0	
UNLAWFUL ACT	12	11.5%	0	
MENTAL ILLNESS	10	10%	1	
MENTAL RETARDATION	2	2%	0	
TOTAL	58	56%	1	1%

difference was not statistically significant ($p = <0.1$). It appears that marital status in our patient population would not be a good predictor of potential abuse or neglect.

Socially deviant behavior of the parent(s) included alcoholism, drug abuse, unlawful act, mental illness and mental retardation. Fifty-six percent of the parents in the abuse/neglect group displayed some type of deviant behavior while only one parent in the control group exhibited deviant behavior. Alcoholism and drug abuse were the primary deviant behavior exhibited. Consideration must be given to the fact that the abusive family is more extensively investigated while the control family was not as closely scrutinized. It is possible that the parent(s) in the control group had a number of deviant behaviors that were not identified because abuse or neglect had not occurred. (Table V) There are various theories on the effect of social or mental problems and their relation to child abuse. One study states that less than 10% of abusers were severely emotionally disturbed while another showed that abuse or neglect was found to have occurred in 41% of the families with an alcohol or opiate addicted parent.[17,18]

In our study, alcoholism and drug abuse were the primary deviant behaviors (59% of parents). Correlation of this factor was not possible because of the lack of deviant behaviors in the control group. It is apparent that deviant behavior is a factor in the abuse/neglect group, since 56% of the parents in this group did display some types of deviant behavior.

Few pediatric disorders lend themselves as readily to prevention as child abuse and it is clear that society cannot support the escalating cost of crisis care.[19] Short term stimulation programs in nurseries designed for prematures and their socially disadvantaged mothers apparently fail to reflect any effects of that type of intervention.[20] The infant or child "at risk" is often subjected not only to the danger of physical abuse, but also to problems of poor nutrition, inadequate stimulation, absence of affection and a generally disorganized and deprived environment.[21] It seems logical, therefore, that successful programs to alleviate abuse/neglect will require early long term intervention that addresses not only medical needs but nutritional and social needs of both **parent** and **child** as well.

Not all parents are capable of parenting, but it is often possible to provide parent training and support that will maintain an adequate care situation for the child and prevent abuse and/or neglect.

It is important to protect the child and whenever possible, maintain the family unit. Intervention programs have been devised by the Children and Youth Project to prevent abuse/neglect. The vital elements of these programs are early, intensive and continued intervention. Community agencies must be involved in these strategies. Home visits appear to be important and 1:1 contact with the parent also appears to be an effective technique. It is our belief that in majority of cases, abuse can be stopped before it starts, if we determine the families that are at greatest risk for abuse and then effectively plan intervention strategy using all the resources that are available to us.

SUMMARY

A study of 155 children in a high risk population suggests that low birth weight (less than five pounds), maternal age of less than 15 or greater than 30 and socially deviant behavior are possible predictive factors for abuse and neglect in our high risk patient population.

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Pituitary Adenomas Before and During Pregnancy

Joseph S. Sanfilippo, M.D.

PROLACTINOMAS are pituitary tumors secreting prolactin. They are categorized as microadenomas (< 10 mm) or macroadenomas (> 10 mm). In the form of microadenomas, they have been found at autopsies in 2.7[1] to 22.5[2]% of "asymptomatic" patients. Perhaps the widespread use of oral contraceptives is associated with an increased incidence of pituitary tumors as suggested by Sherman, *et al.*[3] The primary symptom associated with hyperprolactinemia is galactorrhea. Before discussing prolactin producing tumors, the physiology of prolactin must be reveiwed.

Prolactin is mammotropic, *ie,* it is necessary for breast differentiation and development. It is anabolic—having properties similar to growth hormone. The role of prolactin at the gonadal level is unclear. At elevated levels, it may interfere with the effects of follicle stimulating hormone (FSH) and luteinizing hormone (LH) in steroidogenesis, thereby causing anovulation and amenorrhea. Elevated prolactin levels may also interfere with the physiologic release of FSH and LH from the anterior pituitary gland. Hence, this effect plays a role in the etiology of the amenorrhea-galactorrhea syndrome.

Why some women have galactorrhea in the presence of normal prolactin as well as why some have elevated prolactin without galactorrhea are interesting questions. Perhaps the answers are related to individual sensitivity of the breasts to prolactin as well as to the biologic forms of prolactin, *viz* three forms of prolactin—little, big, and big, big types. Studies of patients with pituitary tumors have revealed that the total prolactin measured reflects 60-90% as little prolactin, 15-29% as big prolactin, and 10% or less as big, big prolactin.[4]

From the University of Louisville School of Medicine, Department of Obstetrics and Gynecology. Reprinted with permission from the PCC Newsletter, December 1981.

When a patient presents with galactorrhea, with or without amenorrhea, a detailed history and physical examination must be performed. The history should evaluate medications taken: (1) estrogens, (2) dopamine receptor blockers—phenothiazines, butyrophenones, metcoclopramide, sulpiride, pimozide, (3) catechol depleting agents—alphamethyldopa, morphine, reserpine, (4) histamine antagonist—cimetidine, and (5) medications which interfere with dopamine—norepinepherine reuptake, imipramine, and amphetamines. Hypothyroidism, Nelson's syndrome, acromegaly, renal failure, or ectopic prolactin production must also be determined. Chest wall lesions (example: herpes zoster), trauma, or mastectomy,[5] as well as whiplash (transection of the pituitary stalk) cause hyperprolactinemia. Upon completion of this evaluation, a serum prolactin must be obtained, coordinated with time of eating. Quigley,[6] *et al,* have shown an elevation in prolactin after luncheon meals but not after dinner. Serum prolactin levels above 200 ng/ml are almost always associated with pituitary tumors. Levels between the upper limits of normal and 200 ng/ml are "suspicious" for the presence of a tumor. Depending on the level of prolactin, one may elect to obtain a plain film, computerized tomograms (C.T. scan), or hypocycloidal tomograms to evaluate the sella turcica. Abnormalities such as double floors, clinoid erosion, sella volume, or an empty sella must be assessed. Klineberg, *et al,*[7] in a study of 235 patients with non-puerperal galactorrhea noted that 20% had radiologically evident pituitary tumors; it rose to an incidence of 34% if amenorrhea was associated with the galactorrhea. Most of the women with galactorrhea developed this symptom following pregnancy, and the majority had regular menses.

If there is demonstration of a pituitary tumor—dynamic testing of the gland must be performed. Evaluation of the pituitary gland-target organ axis

(thyroid, adrenal, and ovarian) should be carried out. This is accomplished by evaluating serum thyroid stimulating hormone (TSH) and subsequently administering thyroid releasing hormone (TRH), metyrapone (11β hydroxylase inhibitor), clomiphene stimulation, gonadotropin releasing hormone (GnRH), insulin tolerance testing, or L-Dopa administration.

If a patient has a pituitary tumor and desires to achieve pregnancy, management depends, in part, on the size of the tumor. Magyar and Marshall[8] evaluated 91 pregnancies in 73 women with untreated pituitary tumors. Ovulation occurred spontaneously in 9%, headaches in 23%, and visual disturbances in 25%, with 61% remaining asymptomatic. Thirty percent required surgery or radiation, either during or soon after pregnancy. In 78 pregnancies occuring in 73 women with previously treated pituitary tumors, headache occurred in 4% and visual disturbances in 5%. Only one patient required therapy. Treatment during pregnancy resulted in a significantly increased incidence of prematurity, but unchanged abortion or perinatal mortality rates. This work emphasizes the importance of treatment of the pituitary tumor prior to achieving a pregnancy. In a similar vein, Gemzell and Wang[9] noted spontaneous abortion rates of 16.1% and term pregnancy rates of 83.9% in patients with untreated macroadenomas, as opposed to 7.1% and 92.9% respectively in those treated for pituitary adenomas.

Therapy may be surgical, in the form of transphenoidal hypophysectomy with removal of the tumor, or medical. The latter has been addressed by McGregor, *et al,*[10] utilizing bromocriptine mesylate (Parlodel) to lower levels of prolactin and "shrink" the pituitary tumor. Since medication lowers prolactin levels, it is associated with ovulation occuring due to the decreased refractoriness of the gonads to FSH and LH as well as normalization of serum FSH and LH levels. However, current FDA approval of Parlodel is for treatment of elevated prolactin in the absence of a pituitary tumor. If one elects to treat hyperprolactinemic patients with bromocriptine mesylate, therapy may be prescribed as follows: 2.5 mg BID × 21 days, off × seven days, at which time menses should occur in the absence of pregnancy. If no menstrual period ensues, a pregnancy test must be checked. If negative, a subsequent course of Parlodel should be resumed. An alternative method of therapy is bromocriptine mesylate given as 2.5 mg BID continuously with "periodic" pregnancy tests.

Bromocriptine has been evaluated in 805 pregnancies.[11] The reported incidence of congenital malformation and spontaneous abortions did not exceed that expected from the general population at large. Further studies are necessary before concluding whether Parlodel is or is not teratogenic.

If a patient conceives with a micro- or macroadenoma, she must be followed closely for signs of pituitary enlargement during pregnancy. Evaluation for headaches or visual disturbances must be checked throughout pregnancy. Frequent visual field examinations before and during pregnancy are necessary. There is no indication for skull films, polytomograms, or C.T. scans during pregnancy. Care should be taken in interpreting the visual field defects discovered in the course of pregnancy, since concentric contraction of visual fields and enlargement of the blind spot occur normally during an uneventful pregnancy.[12]

If visual field disturbances occur, therapy may involve use of dexamethasone,[13] bromocriptine mesylate,[14] or surgical hypophysectomy.[15] Bromocriptine may be the treatment of choice, both to decrease size of the pituitary tumor[10] and to treat the visual disturbances during pregnancies that arise from the enlargement of the pituitary gland with impingement upon the optic chiasma.

In summary, all abnormal breast secretions must be evaluated, and appropriate management, medical or surgical, instituted prior to achieving a pregnancy. Careful observation for signs and symptoms of pituitary enlargement is mandatory after conception occurs.

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Symposium on Neoplasms of the Large Intestine, Rectum and Anus. Presented by the James Graham Brown Cancer Center, 529 South Jackson Street, Louisville, Kentucky. December 10, 1982, John S. Spratt, M.D., Program Director (502) 588-5593

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Therapeutic Apheresis

MARIE M. KEELING, M.D., PATRICIA B. BLANDFORD, M.T.,
MICHELE M. GRADY, M.T. and JENNIFER E. TODD, M.T.

For the past 3½ years, a therapeutic apheresis unit has been operating at Norton Hospital and Kosair-Children's Hospital, Louisville, Kentucky. This new treatment modality has been employed in the successful management of adult and pediatric patients with a variety of disease states. To date, over 400 procedures have been performed with no serious adverse reactions encountered.

IN the past few years, the availability of efficient methods of automated cell separation has caused the emergence of a rather singular mode of treatment called apheresis. Even a cursory scan of contemporary literature reveals an expanding list of disease states which can ostensibly be benefitted by this procedure, whether it be plasma or red cell exchange, or platelet, leucocyte or erythrocyte apheresis. Exchange implies the removal of large quantities of an unwanted blood component from the patient-donor with an appropriate parenteral fluid replacement, usually normal fresh frozen plasma or albumin. Apheresis, on the other hand, signifies the withdrawal of only the undesirable blood fraction with little or no fluid replaced, other than saline or other electrolyte solution to avert marked volume changes.

Currently, two types of separator, the continuous or semi-continuous flow, are being used. With either instrument, efficient operation ensures the amount of blood being removed and replaced is closely supervised, so that no gross disturbance in the patient's fluid balance will occur.

All therapeutic apheresis procedures at NKC-Jewish Hospitals are performed on the Haemonetics Model 30 Blood Processor (Haemonetics Corporation, Braintree, Massachusetts). The software arrangement on the Model 30 is the same as that recommended by the manufacturers, with modifications being made as required for different procedures. The system is a closed one and the software is disposable, decreasing the risks of infection. There is no set "recipe" for apheresis, as each procedure must be tailored to the patient and the blood component being removed. The following is a general description of a plasma exchange.

Acid citrate dextrose (ACD) Formula B (Fenwal) is the anticoagulant of choice, and is used in the ratio of one part ACD to eight parts whole blood. The ACD is introduced into the system shortly after the blood leaves the vein; thus the patient receives no direct anticoagulation. Blood is withdrawn from the patient through a 16-gauge needle. The patient's blood flows by gravity into a "monitor" pouch, from which it is pumped into a centrifuge bowl and visibly separated into its various components: packed red blood cells (PRBC's), the buffy coat fraction containing platelets and white blood cells, and the plasma. During a typical plasma exchange, the plasma is collected, weighed and discarded. All other blood components are returned to the patient. Each such cycle is termed a "pass," and enough passes are performed to exchange the equivalent of the patient's estimated plasma volume. Replacement fluids, like normal plasma, are continuously infused during the procedure through a second vein. The extracorporeal blood volume never exceeds 15% of the estimated total blood volume. A detailed flowsheet including fluid changes is kept by the technologist throughout the procedure and a copy is placed on the patient's chart.

For the past 3½ years, a therapeutic apheresis unit has operated at NKC-Jewish Hospitals. A team of medical technologists, under the medical director of the NKC blood bank, offers 24

For reprints contact Marie M. Keeling, M.D., NKC Blood Bank, P.O. Box 35070, Louisville, KY 40232

TABLE I
ROUTINELY EVALUATED LABORATORY DATA

Pre-Pheresis

*Complete blood count
*Platelet count
*Prothrombin time
*Activated partial thromboplastin time
*Fibrinogen
Blood urea nitrogen
Serum creatinine
*Serum calcium
Serum total protein
Serum albumin
*Blood culture
**Immunoglobulin A
**Australian antigen (HAA)

*Repeated Post Pheresis
**Performed on 1st Pheresis only

hours a day, seven days a week coverage for the procedure, which is available on consultation to any physician member of the medical staffs of the hospitals.

The team consists of medical technologists, skilled not only in the operation of the separator but also experienced blood bankers, knowledgeable in the all important areas of coagulation and clinical immunology. Additionally, they have been certified in cardio-pulmonary resuscitation techniques.

The service may be initiated by the clinician's conferring with the apheresis director about a proposed case. After complete review of the patient's problem, the director decides whether or not the therapy is indicated, spells out appropriate safeguards, and tailors the procedure to the individual patient, as regards the type of apheresis, replacement fluids, etc. Apheresis is thoroughly explained to the patient during a team visit. Proper consent forms are completed and essential laboratory work (Table I) is obtained.

To date, using the Haemonetics "30" Cell Separator, over 400 procedures have been performed. A majority are plasma and red cell exchanges, although there have been erythrocyte, plasma, leucocyte and platelet aphereses and rarely a combined plasma-red cell exchange (Graph I).

Three types of centrifuge bowl, the use of which is dictated by patient size and total blood volume, are available. Two adult bowls (375 and 225 ml) and a pediatric bowl (100-125 ml) allow

TABLE II
DISORDERS TREATED WITH APHERESIS

Allergic diseases
Aplastic anemia
Autoimmune disorders
Biliary cirrhosis
Bone marrow transplants
Cancer
Coagulation inhibitors
Connective tissue disorders including disseminated lupus and rheumatoid arthritis
Diabetic hypertriglyceridemia
Drug overdose or poisonings
Familial hypercholesterolemia
Glomerulonephritides
Goodpasture's syndrome
Guillain-Barré syndrome
Hemolytic-Uremic syndrome
Hepatic failure
Hemoglobinopathies
Idiopathic thrombocytopenic purpura
Immune complex-mediated diseases
Leukemia
L-Thyroxine intoxification
Meningococcemia with DIC
Multiple myeloma
Multiple sclerosis
Myasthenia gravis
Pemphigus vulgaris
Polycythemia of various types
Pancreatitis
Raynaud's disease
Refsum's disease
Renal transplant rejection
Rhesus-Hemolytic disease
Sarcoidosis
Thrombocytosis
Thrombotic thrombocytopenic purpura
Thrombocytopenia
Thyroid disease
Ulcers, necrotizing
Waldenström's Macroglobulinemia

adaptability to most patients (Graph II). The youngest child was 28 months old and weighed 36 pounds.

Therapeutic apheresis has been employed in the management of a large number of diseases (Table II). Those with which NKC has had experience are noted (Table III).

In general, plasma exchange has been found to alter considerably the course of any disorder in which circulating antibodies or immune complexes are important in the pathogenesis. Classical examples are myasthenia gravis and Goodpasture's syndrome. Relatively large groups of patients with myasthenia have undergone plasma exchange which markedly arrested dis-

TABLE III
APHERESIS EXPERIENCE AT NKC

	Procedures	Patients
Acute lymphocytic leukemia	2	1
Acute myelogenous leukemia	1	1
Aplastic anemia	51	2
Chronic myelogenous leukemia	2	2
Crescentic glomerulonephritis	9	1
Hepatitis	3	1
Hepatic coma	5	2
Idiopathic thrombocytopenic purpura	43	8
Multiple sclerosis	8	1
Multiple myeloma	5	2
Periarteritis nodosa	4	1
Polycythemia	55	21
Psoriasis	7	1
Reye's syndrome	6	3
Renal failure	1	1
Renal rejection	4	2
Rheumatoid arthritis	115	6
Scleroderma	5	1
HbSS or HbSC disease	21	11
Sideroblastic anemia	1	1
Systemic lupus erythematosus	37	5
Thrombocytosis	2	1
Thrombotic thrombocytopenic purpua	13	3
Thrombocytopenia (gold induced)	1	1
Thrombocytopenia (2° SLE)	5	1
Waldenström's Macroglobulinemia	7	1
Miscellaneous	10	6

ease in some, helped in others, and appeared of no benefit in a few.[1,2,3]

When high levels of circulating immune complexes (CIC) are present in systemic lupus, plasma exchange has been found to dramatically improve the patient. This has not, however, been a constant finding.[4,5] The disparity might well be caused by a number of factors, including individuals in different stages of disease. Of the five far-advanced lupus patients exchanged at NKC, two showed significant improvement. One exhibited a dramatic cessation of generalized bleeding, improved mental status, and increased strength and feeling of well being. Her improvement corresponded directly with a post-exchange drop in the CIC (Graph III). Often, while not curative, the exchange allows at least the reduction of corticosteroid and other immunosuppressive drug dosage, a considerable benefit in itself.

As has been the experience of others, the present investigators have found the hyperviscosity syndrome secondary to primary macroglobulinemia or myeloma considerably ameliorated by plasma exchange. In two instances, it resulted in the patients awakening from deep coma. Specific chemotherapy could then be initiated.

Plasma exchange has been of some aid in the management of immune thrombocytopenia, whether idiopathic or secondary to drugs.[6,7,8] Two adult women, both suffering from the bleeding complications of marked thrombocytopenia, exhibited very favorable response. In one, in whom pronestyl had caused a life threatening hemorrhage one week after open-heart surgery, platelets were eventually restored to normal with no additional therapy. Corticosteroids were necessary as follow up support in the other patient, in whom advanced old-age contra-indicated splenectomy.

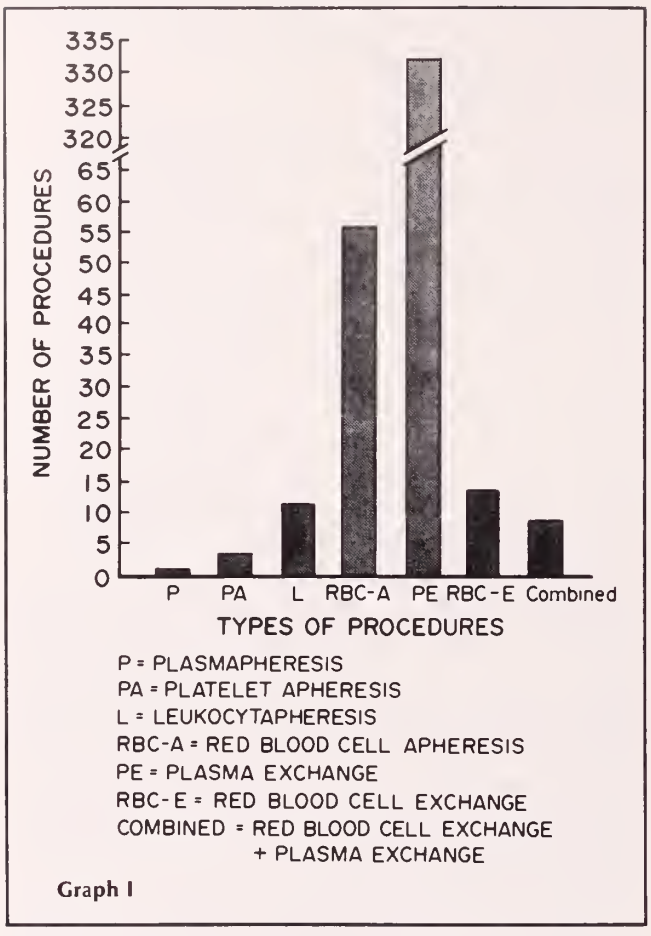
Several children, with chronic autoimmune thrombocytopenic purpura have also reacted quite favorably to plasma exchange. Underresponsive to corticosteroids and with a life threatening cranial hemorrhage a distinct possibility, two were supported with plasma exchange until a curative splenectomy could be performed. Another two achieved a sustained remission after combined plasma exchange and a course of immunosuppressive drugs.

Perhaps the most dramatic setting in which plasma exchange has been of primary importance in effecting a cure has been thrombotic thrombocytopenic purpura.[9] Two patients in the current series were aided by this modality in treating a disease that until the past few years carried a mortality rate in excess of 90%.

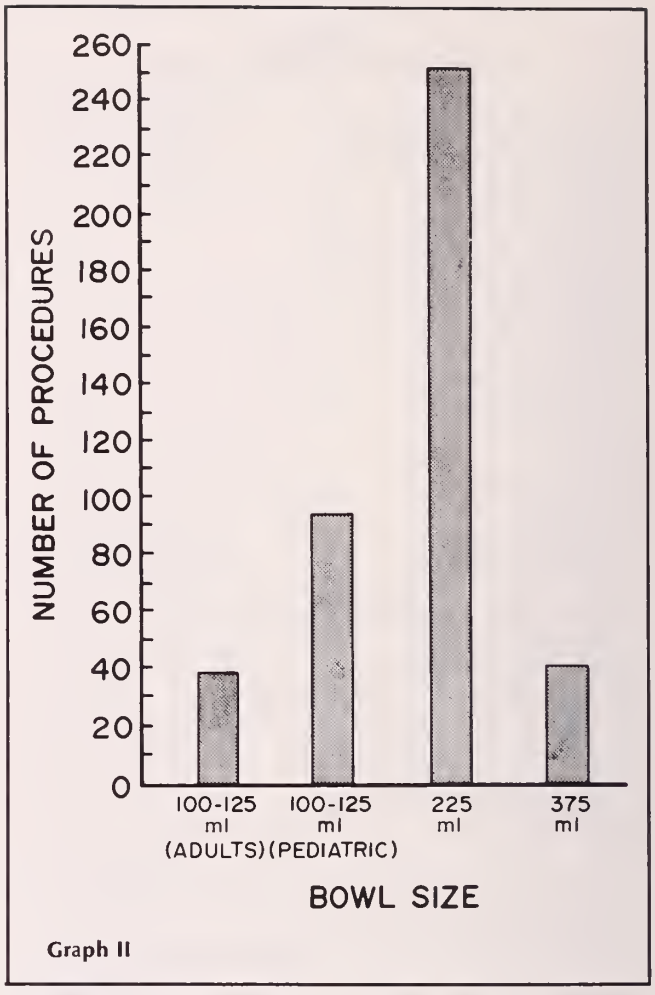
Red blood cell exchange has become a staple in the effective treatment of the individual harboring a major hemoglobinopathy. In the hands of the present group, it has proven of inestimable worth in the successful management of the pregnancy complicated by such a hemoglobin variant, major crises unresponsive to conventional therapy, and before surgery.[10]

Many other serious disorders were benefitted by the various aphereses performed by the NKC group (Table III). Results ranged from minimal beneficial effect to significant improvement of the patient.

No serious adverse reactions directly attributable to apheresis were encountered. The most common side effects were occasional generalized tingling secondary to hypocalcemia, and



Graph I



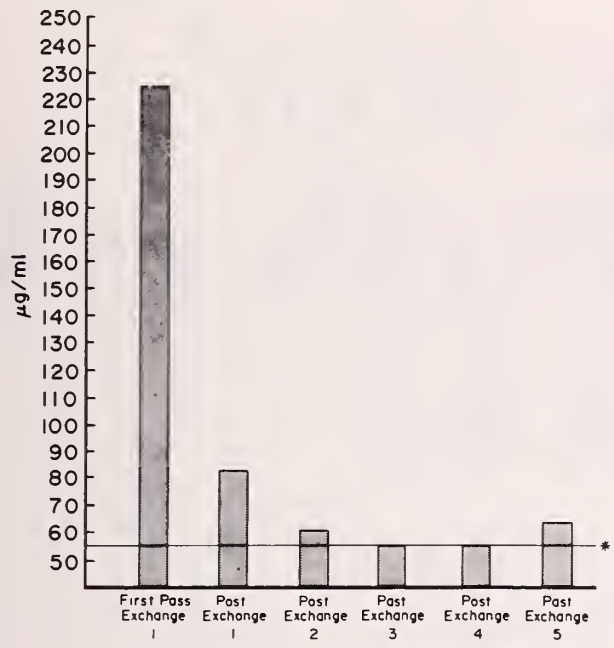
Graph II

urticaria following the infusion of fresh frozen plasma. Indeed, the apheresis patient suffered virtually no side effects, often dining and watching television as the treatment progressed. After the initial session, the procedure has occasionally been done on the outpatient.

Significant problems have included lack of vascular access, especially in the apheresis patient undergoing numerous procedures; expense of the process; and failure of insurance carriers to reimburse for some treatment.

The exuberance of the early growth period with its many attendant pains appears finished. Therapeutic apheresis has now entered a second phase of true, sustained development in which healthy control measures will allow its emergence as a therapeutic modality of paramount importance. Already it has proven its worth as either an ancillary or definitive treatment in many diverse diseases. With various modifications currently being developed, its promise for future performance is even more exciting.

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Graph III

treatment of fulminant idiopathic (autoimmune) thrombocytopenic purpura. *Lancet* 1:688-90, 1978. **7.** Novak R, Wilimas J: Plasmapheresis in catastrophic complications of idiopathic thrombocytopenic purpura. *J Pediatr* 92:434-36, 1978. **8.** Marder VJ, Nusbacher J, Anderson FW: One-year follow-up of plasma exchange therapy in 14 patients with idiopathic thrombocytopenic purpura. *Transfusion* 21:291-98, 1981. **9.** Myers TJ, Wakem CJ, Ball ED et al: Thrombotic thrombocytopenic purpura: Combined treatment with plasmapheresis and antiplatelet agents. *Ann Intern Med* 92:149-55, 1980. **10.** Keeling MM, Lavery JP, Clemons AU et al: Red cell exchange in the pregnancy complicated by a major hemoglobinopathy. *Am J Obstet Gynecol* 138:185-88, 1980.

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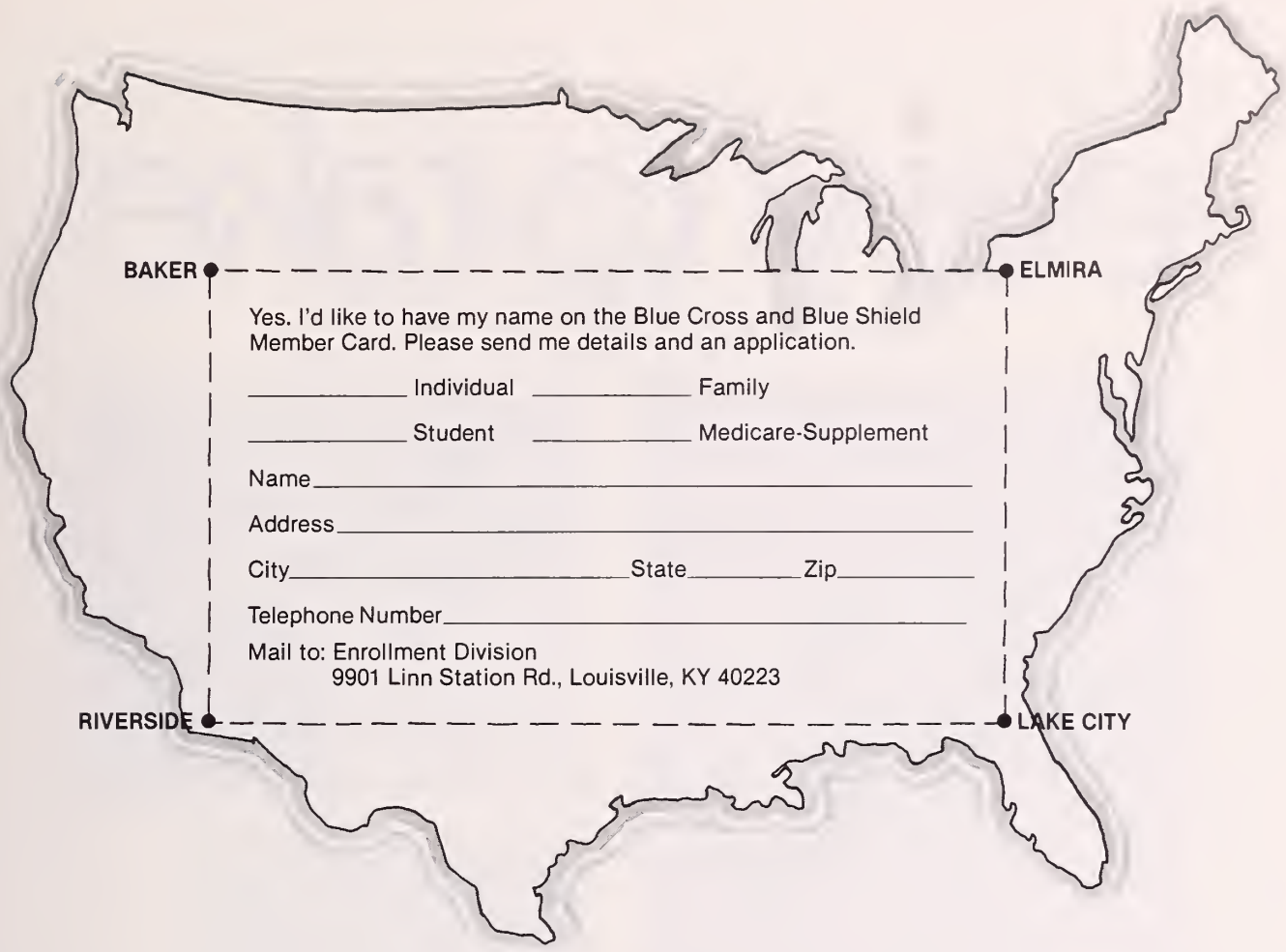
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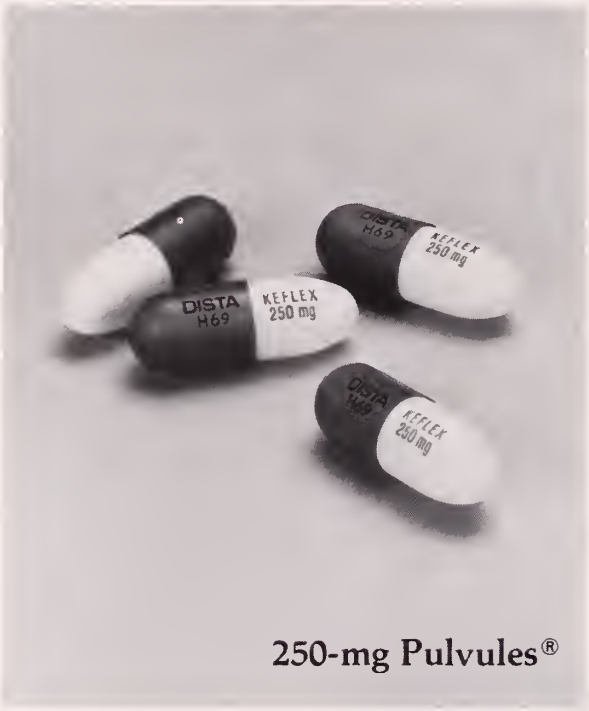
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SPECIAL ARTICLE

Where Doctors Are Going

Physician Location Trends in Kentucky

JAMES K. COOPER, M.D. and TIMOTHY JOHNSON, M.A.

In the United States, there has been an increasing supply of physicians relative to population, and more physicians have been moving into non-metropolitan areas. To determine if similar trends are present in Kentucky, current data were analyzed and compared to 1970 data. Sixteen counties in Kentucky had a net increase of over 20 physicians. The physician/10,000 population ratios now vary from a low of zero (no physicians) in Robertson County to a high of 50.4/10,000 in Fayette County. When compared to average national physician/population rates for similar counties (metro or non-metro), 24 Kentucky counties were more than 10% above, and 90 counties were more than 10% below average. While there has been a diffusion of physicians into some non-metropolitan areas in the state, many counties continue to have low physician availability compared to national averages.

EACH year there are more physicians practicing in the United States. The national increase in physicians has led some to conclude that "the nation (is) heading toward a physician surplus."[1] There also has been an increase in the number of physicians in Kentucky. Five years ago, the Legislative Research Commission pointed out that the number of physicians in Kentucky was increasing at a rate faster than the overall population.[2] They cautioned, however, that the ratio of physicians-to-population remained below the national average. The increase in number of physicians is said to have an effect on physician distribution. Recently a national study concluded that, because of the increasing supply, physicians were diffusing into smaller communities.[3] A review covering Kentucky from 1847 to 1976 indicated that while improvement in the physician/population ratio had occurred in some regions in the post World War II era, "there is no reason to believe that stability has been achieved."[4] There apparently are no analyses of current Kentucky data. This study examines recent physician data for Kentucky to determine if there are important changes in physician distribution.

From the Department of Medicine, University of Kentucky Medical Center, Lexington, Kentucky 40536-0084

Methodology

Data for the number of physicians in each county were tabulated from the 1970 and 1982 Kentucky Medical Directories.[5,6] Osteopaths were included in the tabulations. Data on net change in the number of physicians were obtained by subtracting the number of physicians in each county in 1970 from the number in 1982. To provide a current estimate of the availability of physicians to patients, the ratio of physicians per 10,000 population was also completed. County population data for 1980 were obtained from the Census Bureau.[7]

Counties were classified as metropolitan and non-metropolitan based on the Census Bureau's 1974 Standard Metropolitan Statistical area (SMSA) classification of Kentucky counties.[8] Seventeen of the state's 120 counties were classified as being part of one of the seven SMSAs either in or partly within the state.* All other counties were classified as non-metropolitan.

TABLE 1
1982 KENTUCKY PHYSICIAN RATES
PER 10,000 POPULATION
BY COUNTY

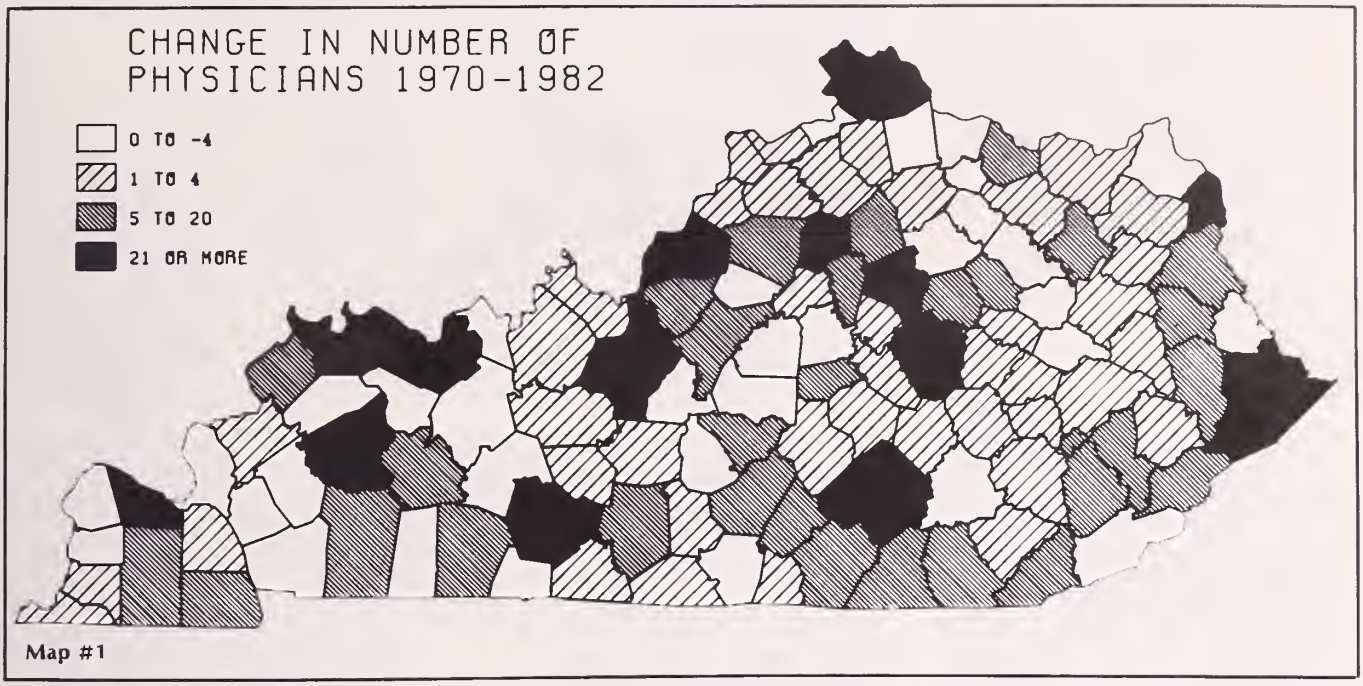
Adair	8.6	Grant	4.5	Mason	14.8
Allen	6.4	Graves	8.2	Meade	1.8
Anderson	4.8	Grayson	4.9	Menifee	2.0
Ballard	3.4	Green	6.4	Mercer	6.9
Barren	11.0	Greenup	2.8	Metcalfe	2.1
Bath	4.0	Hancock	2.6	Monroe	9.0
Bell	14.4	Hardin	10.4	Montgomery	7.5
Boone	11.0	Harlan	10.7	Morgan	5.8
Bourbon	6.7	Harrison	7.3	Muhlenberg	7.5
Boyd	17.9	Hart	6.0	Nelson	5.1
Boyle	18.8	Henderson	12.8	Nicholas	4.2
Bracken	3.9	Henry	4.7	Ohio	3.2
Breathitt	2.4	Hickman	6.6	Oldham	3.7
Breckinridge	5.3	Hopkins	21.9	Owen	3.4
Bullitt	2.3	Jackson	4.2	Owsley	3.5
Butler	0.9	Jefferson	26.6	Pendleton	2.7
Caldwell	5.2	Jessamine	4.7	Perry	10.8
Calloway	13.0	Johnson	10.3	Pike	10.6
Campbell	12.6	Kenton	15.2	Powell	4.5
Carlisle	3.7	Knott	2.8	Pulaski	11.6
Carroll	9.7	Knox	3.3	Robertson	0.0
Carter	2.4	Larue	1.7	Rockcastle	3.6
Casey	4.1	Laurel	2.6	Rowan	17.3
Christian	11.5	Lawrence	12.0	Russell	6.7
Clark	7.8	Lee	5.2	Scott	6.0
Clay	4.4	Leslie	7.4	Shelby	7.2
Clinton	6.6	Letcher	9.3	Simpson	5.5
Crittenden	4.3	Lewis	2.1	Spencer	3.4
Cumberland	4.2	Lincoln	3.2	Taylor	9.1
Daviess	15.2	Livingston	5.4	Todd	3.4
Edmonson	5.0	Logan	9.1	Trigg	6.4
Elliott	4.4	Lyon	4.6	Trimble	4.8
Estill	5.5	McCracken	21.6	Union	7.3
Fayette	50.4	McCreary	4.5	Warren	15.7
Fleming	5.7	McLean	3.0	Washington	3.7
Floyd	9.5	Madison	10.1	Wayne	6.5
Franklin	15.8	Magoffin	3.0	Webster	4.7
Fulton	11.2	Marion	4.5	Whitley	12.5
Gallatin	2.1	Marshall	5.5	Wolfe	3.0
Garrad	5.5	Martin	2.9	Woodford	9.7

Results

Between 1970 and 1982, 16 Kentucky counties had an increase of over 20 physicians (Map 1). The total number of physicians increased by 72%, from 3141 to 5404. Most of the increase (70%) was in the state's metropolitan counties. The largest increase was in Jefferson County, with a net increase of 796 physicians. The next largest increases were in Fayette County 472 and Kenton County 83.

The ratio of physicians per 10,000 population in 1982 for the state is 14.8. For comparison, the national average in 1980 was 18.7 physicians per 10,000 population.[9] Within the state, the ratio varies widely. While no physicians are practicing in Robertson County in 1982, there are over 50 physicians per 10,000 in Fayette County (Table 1).

Metropolitan counties have more physicians per 10,000 population than non-metropolitan counties. Collectively, Kentucky metropolitan counties compare favorably to recent national data. Kentucky metropolitan counties now have a physician rate of 22.4 physicians per 10,000 population; the national average in 1980 was 22.1. Kentucky rural counties collectively are



Map #1

below recent national data; the 103 non-metropolitan counties now have a physician/population of 8.5, while the national average in 1980 was 9.5 per 10,000 population.

Collective data show only the statewide averages. From a different perspective, only two of Kentucky's 17 metropolitan counties, Fayette and Jefferson, had 1982 physician ratios 10% or more above the recent national average for metro counties, while 15 had ratios 10% or more below the recent national average (Map 2). For non-metropolitan counties, 22 of the 103 such counties in Kentucky have physician ratios 10% or more above the 1980 national average for non-metro counties; 75 have ratios 10% or more below the national average; and the remaining counties are within 10% of the average. For the state, 24 counties are 10% or more above their national 1980 counterpart average, and 90 counties are 10% or more below their counterpart national average.

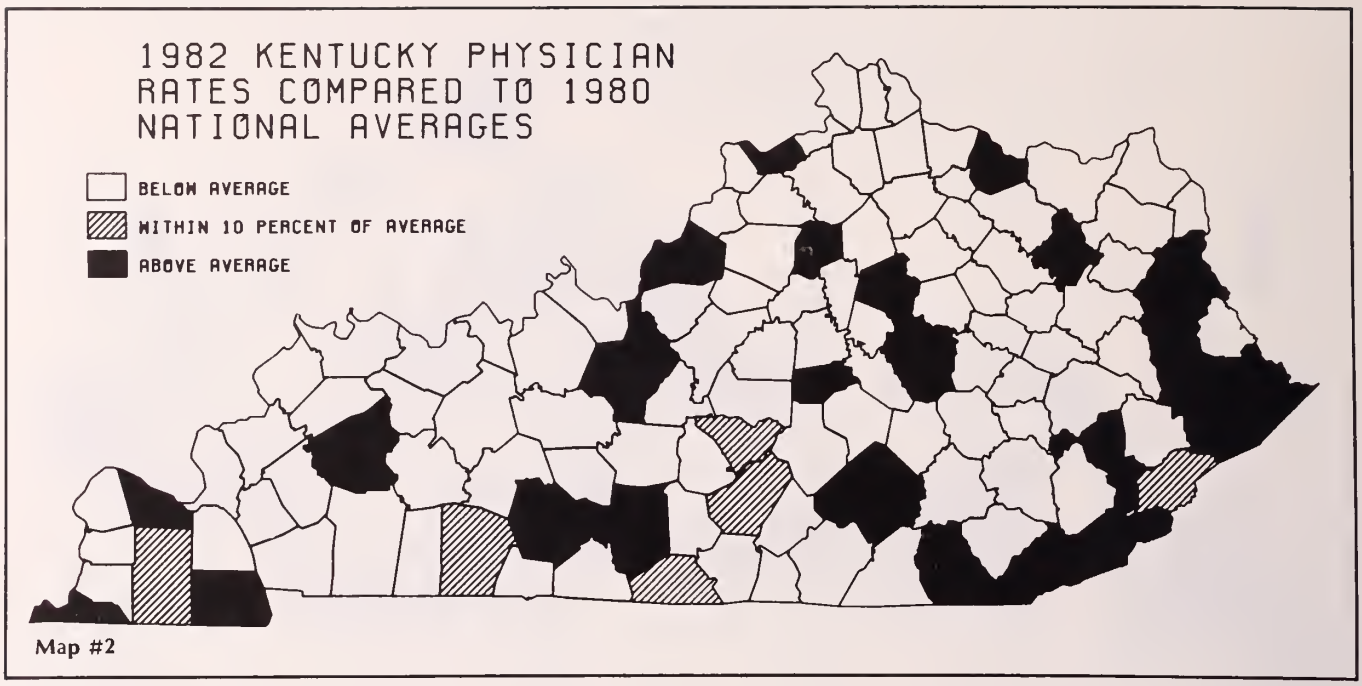
Discussion

Most net physician movement continues to be into metropolitan areas in Kentucky. In addition to these metropolitan centers, however, several non-metropolitan counties with smaller urban communities have also experienced important increases in numbers of physicians. Examples are the counties containing Bowling Green, Paducah, Madisonville, Elizabethtown, Pikeville and Somerset (Warren, McCracken, Hopkins, Hardin, Pike, and Pulaski counties, respectively). This concentration of physicians in smaller urban centers appears to be parallel changing patterns of physician distribution observed elsewhere in which non-SMSA counties containing medium-sized cities are emerging as regional centers of health care.[10]

The counties with the highest physician/population ratios are Fayette and Jefferson. Other SMSA counties, such as Daviess, Boyd, and the Northern Kentucky counties near Cincinnati, have relatively high physician ratios for Kentucky, but because they are classified as metropolitan areas, these counties are not "above average" when compared to other metropolitan counties nationwide.

This study compares 1982 Kentucky data to 1980 national averages, as 1980 is the latest comparable national data available. Because of national trends, it is likely that the number of Kentucky counties above national average today is actually smaller than reported here.

Comparing Kentucky data to national averages does not imply that national averages are adequate. It could be argued that a national average of 9.5 physicians per 10,000 population in non-



Map #2

metro areas represents a physician scarcity. This study uses national averages for comparisons only, without judgement as to adequacy. In addition, these data do not take into account physician specialty or variations in convenience of travel. Some local situations may be better or worse than the simple physician/population ratios imply. Also, while a county may have a low physician/population ratio, access to medical care may be improved by nearness to a county with a higher ratio. An example is Jessamine County, with a low ratio of 4.7 physicians/10,000, which is contiguous to Fayette County. Another example is Hopkins County, where the concentration of physicians undoubtedly serves patients in all surrounding counties.

In general, Kentucky has followed national trends. There are more physicians in the state, and overall the physician/population ratio has increased. Further, there has been a diffusion of physicians into some non-metropolitan areas. Several non-metro parts of the state have a higher physician/population ratio than the national average for such areas. However, many areas of the state, both metropolitan and non-metropolitan, remain below recent national averages.

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***Counties included as part of a SMSA are: Boone, Bourbon, Boyd, Bullitt, Campbell, Christian, Clark, Daviess, Fayette, Greenup, Henderson, Jefferson, Jessamine, Kenton, Oldham, Scott, and Woodford.**








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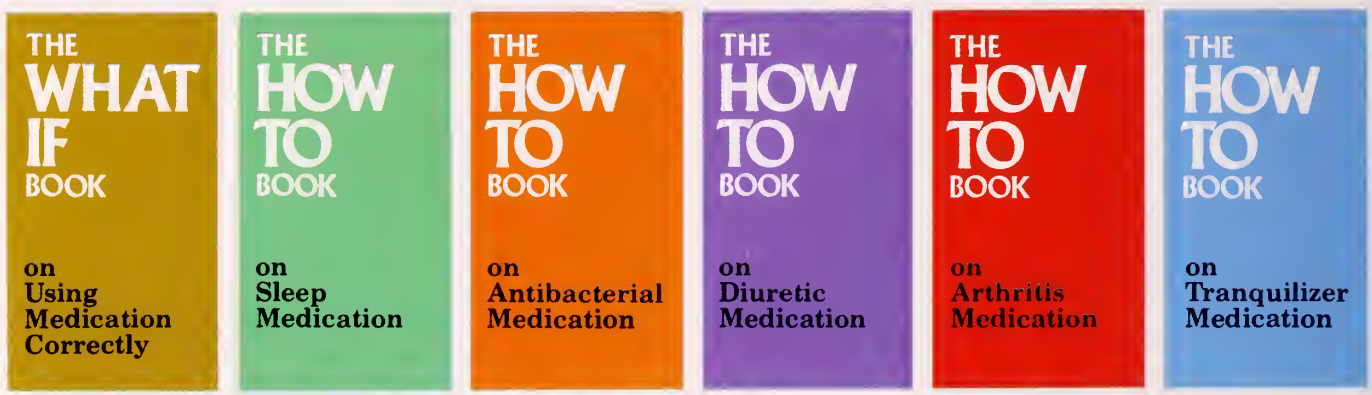
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EDITORIAL

The Historian

I was not just put into the ground.
My tender roots steeped in blue elixir.
Mother Earth was not good enough for me.
They pruned me, sprayed me and bagged
my blossom.
Summer blasts could never drought me.
To thwart the frost their smudge-pots
smudged me.
They trapped the rabbit that would bark me,
And cats patrolled for feathered trophies.
With parental glee they even named me.
God was I ever tended.
It was enough to make you shed green leaves.
But in spite of them my fruit was sweet.

Then came the flash that fried their cones.
The same hot pulse that parched me,
Singed their hair and baked their tended tans,
And left them blinkingly in search of skin.
The wind and fire that marched by me,
Sucked out their air and choked their cries.
How still it was on my sundown hillside.
The leaden sky rained death,
But none of them was left to die.
They, the charred witnesses of the last human rage
Will soon mingle with the beetles and my seeds
And have a final try at making fruit.
My cells stretch and stand me tall.
No matter that my archetimber hugged the earth.
I was not taught to pierce the vine canopy,
To make peace with the borer inside me.
These and other secrets cram my replicore.
How simply my life displays the truth.
Creature relics crumble on this slope
A tribute to the worship of formulae.
Symphonic sounds from crickets, storms and
falling trees
Announce the final curtain of this tragic play.
I bear my fruit and would know if it is sweet
But, alas there are no players left to eat.

William Stodghill, M.D.

Facing the Possibilities

It was not until February 1982 that I was able to read more than the first couple of paragraphs of articles dealing with nuclear war. The effect was so profound—like the scarey sinking feeling I used to get when I thought about death when I was a little boy—that I refused to read on. That is a form of denial, also referred to as psychic numbness. My first honest inquiry took the form of reading The Fate of the Earth by Jonathan Schell (featured in *New Yorker* magazine, February 1, 8, and 15, 1982). I have read other material since then and have not found reason to believe that his factual presentation is incorrect. One may or may not agree with his way of responding to our dilemna. At least he has an opinion.

In 1962 an article[1] in the *New England Journal of Medicine* described the probable medical consequences of a "limited" nuclear strike on a metropolitan area. They estimated that the blast, fire storms, and acute ionizing radiation from detonation of only two neclear weapons would kill 1,052,000 people out of the greater Boston population of three million. Of those surviving the immediate explosion, approximately one million would die from the injuries they received. If each surviving physician spent only 10 minutes on the diagnosis and treatment of each victim and worked for 20 hours a day, it would take 14 days for each injured patient to be seen for the first time. Such an attack would exhaust all the nation's health resources just to treat burns. That assessment

is conservative because our intelligence agencies tell us that Boston would not get off with only two nuclear weapons. It would probably be hit by at least twice that number. The likelihood of an isolated attack on Boston seems to approach zero. That city's plight would have to be viewed as one small sector of a country suffering the pain of a nuclear holocaust. There would be no EMS or other life support aid from Worester or Brockton because they would also be targets.

These prognostications did not deal with long term effects such as climatic changes, degradation of stratospheric ozone layers and the injuries created by unfiltered ultraviolet light, and other profound effects on our biosphere.

In a major nuclear exchange between the U.S.A. and Soviet Russia 100 million casualties might be anticipated by each country as a result of the initial blasts.

An individual who had the "deep hole survival kit" would crawl out of his sanctuary one month after the holocaust to find total absence of society as we know it today. Survivors would be competing for limited food, water and shelter in an environment cluttered by corpses, over populated by disease bearing insects which are more resistant to radiation than humans. Communication systems would have been destroyed by the electromagnetic pulse generated by the intense gamma irradiation at the time of the initial blast. Other survivors, because of their altered immune state, malnutrition, exposure and untreated wounds, would be dying by degrees without the benefit of drugs or skilled medical attention. Existing illnesses such as tuberculosis and viral gastrointestinal disturbances would flourish and epidemics of plague and typhus would be emerging. In such a setting it would be easy to understand that such a survivor might wish to be among the dead.

Over the past decade we have observed a sharp escalation in not only the number of nuclear weapons but in the means of deploying the lethal load. If, with the present megatonage of nuclear weapons on earth, one Hiroshima sized bomb were detonated per minute it would take two years and three months to explode them all. An "advance" in the production of new nuclear technology by the United States is soon followed by a "counter advance" by Russia. The end result seems to be a **decrease** in national security, an **increase** in defense spending at the expense of tending to pressing human needs at home and an **increase** in the peril of a nuclear war. The newest weapons are more difficult to detect, thereby they decrease the reflection time for decision makers at times of international crisis. Professor George Kistiakowsky, a former head of the Explosives Division of the Manhattan Project and science advisor to President Eisenhower, recently stated that it would be a miracle if no nuclear war heads were exploded in anger before the end of this century and only a slightly smaller miracle if that did not lead to a nuclear holocaust.

Some good Americans view taking a critical look at our nation's nuclear weapons posture as being an act of treason. Those same citizens risked their lives as patriots in World War II. I salute them for having done so. Unfortunately the nature of war in the nuclear age has changed so that there is no longer a winnable war. We are not talking about choosing to lay down our lives; rather we are facing the possibility of laying down all of human kind for all times—and along with that we control the existence of all the beasts whose survival and ability to procreate depend on the sanity and quality of our earth stewardship. A nuclear holocaust would destroy the living and cancel the unborn in the same blow.

A local chapter of Physicians for Social Responsibility (PSR) has just been formed here in Louisville. This national group is dedicated to educating the populace about the hazards of nuclear war so that action can be taken to decrease the risk of such an event. Folks look to the medical profession for health guidance and so it is appropriate that we should, as advocates of life, assume leadership in this process. PSR plans to present the film *The Last Epidemic* at a J.C.M.S. meeting in the near future. Please attend. A wise leader said: "It is not incumbent upon you to finish the work—neither can you exempt yourself from it." Any readers who are interested in becoming a member of PSR may write to 23 Main Street, P. O. Box 144, Watertown, Mass. 02172 or contact me.

I believe that there is a healthier way to plot our course than that charted by our government over the past decade. What changes are needed are not clear, but changes there must be. I agree with William James' statement: "The purpose of life is to spend it for something that outlives you." If we are going to avoid the agony of a nuclear holocaust and the prospect of extinction we must use our best intellect and God given creativity toward the **prevention** of nuclear war.

Other informative reading:

Russian Roulette by Arthur Cox.

Nuclear Madness by Dr. Helen Caldicott.

William Stodghill, M.D.

1. NEJM 1962; 266: 1126-55.

But Who Will Bell the Cat?

Our guest editorialist, Doctor Stodghill, makes a very compelling plea as he paints the horrors of a Thermo-Nuclear explosion. No one in his right mind could be in favor of any nuclear wars, so that is not an issue. There can be no Point-Counterpoint over this type of potential omnicide.

The American College of Physicians, in its position paper, "The Medical Consequences of Radiation Accidents and Nuclear War," stress the futility of medical disaster planning for nuclear war. The medical needs after a nuclear blast would simply overwhelm any health care system, no matter how well stockpiled. The A.C.P. states that prevention of nuclear war is imperative and the only answer.

Two more thoughts come to mind. The first is political. How do we bring about a reduction or even a freeze in the arms race? Certainly not unilaterally. How do we bring the Soviet Union to the bargaining table to join us in our endeavor? Are they about to agree to parity now after we allowed them to catch up and then surpass us. I would hope so, but I have my doubts. In fact what modern nation has the courage not to have atomic power in these times of arms race and mistrusts?

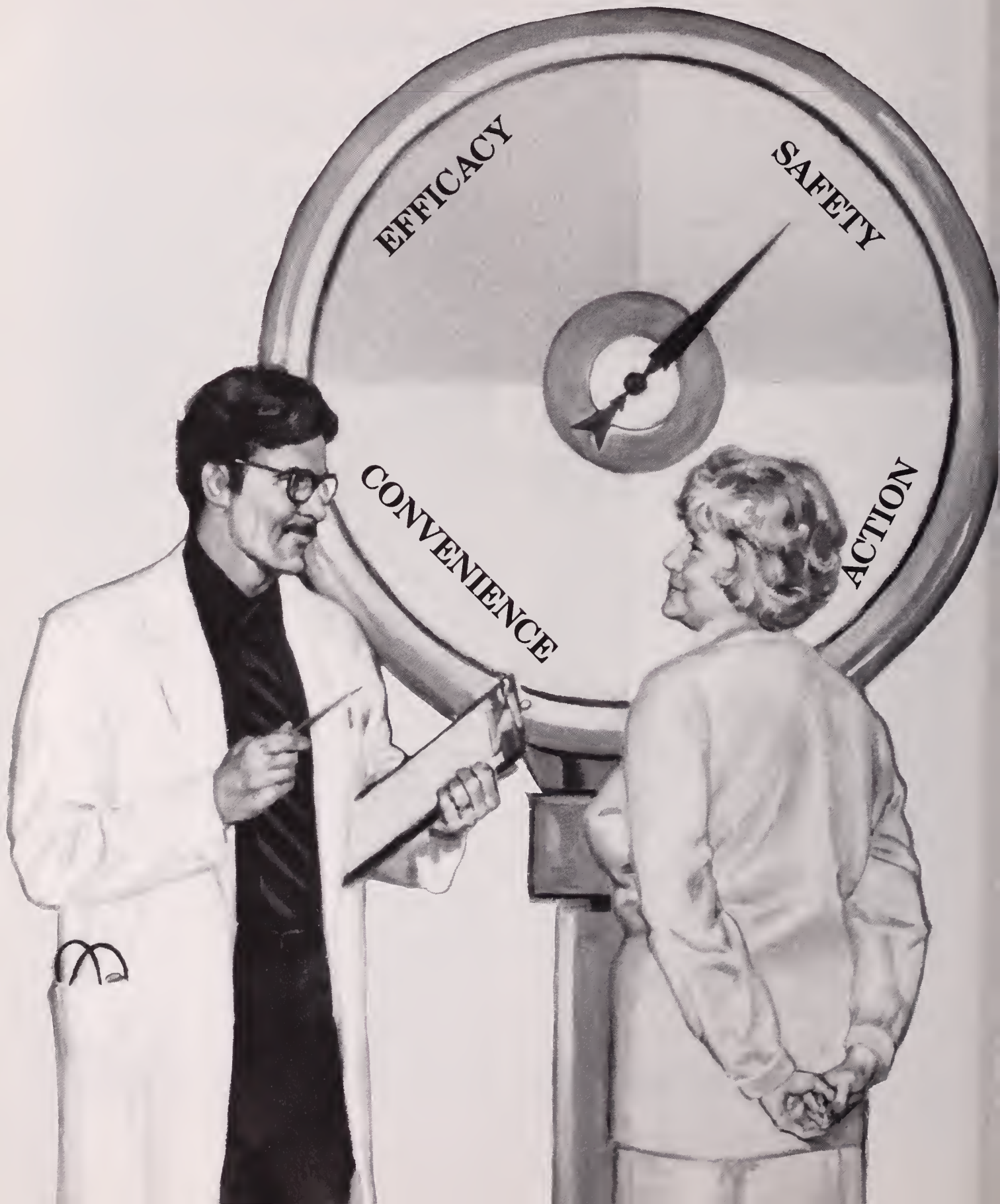
Finally, a brief reminiscence of military history. Atomic energy and its power were not always our master. It has acted as this country's servant. This month 37 years ago, the U.S. Forces were set to invade the southern Kyushu Islands of Japan and then later in March of 1946 invade the Tokyo plain area of Honshu. Our losses would have been staggering. When one reflects upon the carnage of Omaha Beach alone on D-Day (2,500 dead) and extrapolates that number into the Pacific adventure the white crosses begin to multiply. The devices we dropped on the sixth and the 14th of August changed all that.

Let's hope mankind can find the way home.

Milton F. Miller, M.D.

2. U. S. Government Office of Technical Assessment, The Effects of Nuclear War: A summary. Washington, D. C., Govt. printing office 1979.

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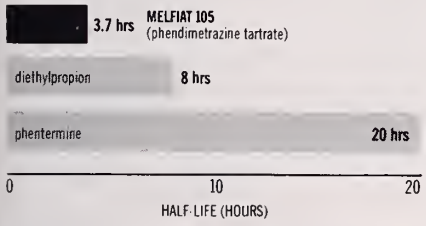


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References: 1. Sheu YS, Ferguson JA, Cooper JR: *Evaluation of the Abuse Liability of Diethylpropion, Phendimetrazine, and Phentermine*, unclassified document ADAMHA, HHS. Office of Medical and Professional Affairs, NIDA, 1980.
2. Douglas JG, Munro JF: The role of drugs in the treatment of obesity, *Drugs* 21:362-373, 1981.

MELFIAT® 105 UNICELLES® C III
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INDICATIONS AND USAGE: Melfiat® 105 (phendimetrazine tartrate) is indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class (See CLINICAL PHARMACOLOGY) should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors (hypertensive crises may result).

WARNINGS: Tolerance to the anorectic effect usually develops within a few weeks. When this occurs, the recommended dose should be discontinued. Phendimetrazine tartrate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Dependence: Phendimetrazine tartrate is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of phendimetrazine tartrate should be kept in mind when evaluating the desirability of including a drug as part of a weight-reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high-dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG, manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

USAGE IN PREGNANCY: The safety of phendimetrazine tartrate in pregnancy and lactation has not been established. Therefore, phendimetrazine tartrate should not be taken by women who are or may become pregnant.

USAGE IN CHILDREN: Phendimetrazine tartrate is not recommended for use in children under 12 years of age.

PRECAUTION: Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine tartrate and the concomitant dietary regimen. Phendimetrazine tartrate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: Cardiovascular: Palpitation, tachycardia, elevation of blood pressure.
Central Nervous System: Overstimulation, restlessness, dizziness, insomnia, euphoria, dysphoria, tremor, headache; rarely psychotic episodes at recommended doses.
Gastrointestinal: Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances.
Allergic: Urticaria.
Endocrine: Impotence, changes in libido.

OVERDOSAGE: Manifestations of acute overdosage with phendimetrazine tartrate include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states.
Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma. Management of acute phendimetrazine tartrate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Acidification of the urine increases phendimetrazine tartrate excretion. Intravenous phentolamine (Regitine) has been suggested for possible acute, severe hypertension, if this complicates phendimetrazine tartrate overdosage.

DOSAGE AND ADMINISTRATION: Since Melfiat® 105 (phendimetrazine tartrate) 105 mg is a sustained-release dosage form, limit to one sustained-release capsule in the morning. Melfiat® 105 (phendimetrazine tartrate) is not recommended for use in children under 12 years of age.

HOW SUPPLIED: Each orange and clear sustained-release capsule contains 105 mg phendimetrazine tartrate in bottles of 100.

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The World's Eye

Albert M. Potts, M.D., Ph.D., Lexington, KY, University Press of Kentucky, 1982, 93 pages

The author, one of this nation's senior and foremost ophthalmic investigators and clinicians, has for several decades had an avocational interest in the lore and the legend of the eye. In this tightly packed volume he foreswears his technical and scientific interest in the eye. As a deeply ingrained scientist he also foreswears undocumented interpretations of artifacts. Where relics, devices and engravings have only themselves to speak for them, he does not venture into conjecture.

The substance of his book stems from the evil eye concept found before recorded history, in all cultures, and in every part of the globe. He equally treats the protective armamentarium—the countervaling forces, the amulets, the good eyes, the eye of Horus and the 100 eyes of Argus. He quickly creates a parallel with today's "watchbird" that was created by Mr. Munro Leaf, and with equal quickness recognizes the multiple and indirect factors which bear on motives in primitive society. This book "is about how all the world exclusive of scientists looks upon the eye. It is about the World's Eye."

Because Dr. Potts has observed and photographed critically during his lifetime of extensive traveling and because he has been an incorrigible note taker while visiting hundreds of the world's great and small museums, this gem of a volume provides the known cultural setting, the known legends, and the known geography for this array of the world's eyes. The meat of this volume is arranged in seven chapters; The Evil Eye, The Eye of Horus and Other Eye Amulets, The Eye of Medusa, Behind the Mask, The Eyes of Argus, The Ojo de Dios, and The Eye of Providence.

Don't look for a fascinating running mystery like Agatha Christie or the ophthalmologist writer of Sherlock Holmes, Dr. Arthur Conan Doyle. To read this seriously you will compulsively reach for a reader's encylopedia, a gazetteer, and a dictionary of mythology.

Though lesser and differing volumes have been published under the title "The Evil Eye" by ophthalmologist Edward S. Gifford, Jr., (1958), or philologist, Frederick Thomas Elworthy (1895), none are as devoid of undue interpretative extravaganzas nor better documented than these pages of Potts. For those of us who still cherish U.S. coinage, The Eye of Providence on the reverse of the great seal of this nation is clearly related to its design environment; a charming note indicates that it was decided upon after dinner of, July 4, 1776, by the elite committee of Benjamin Franklin, John Adams and Thomas Jefferson. Though man still endures his "days of misery and nights of fear" which Dr. Potts traces from pre-recorded history, it is still comforting to have our symbols of security and have them woven into a literary fabric of exceeding quality.

Arthur H. Keeney, M.D., D.Sc.

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INDICATIONS AND USAGE Ru-Tuss Tablets provide relief of the symptoms resulting from irritation of sinus, nasal and upper respiratory tract tissues. Phenylephrine and phenylpropanolamine combine to exert a vasoconstrictive and decongestive action while chlorpheniramine maleate decreases the symptoms of watering eyes, past nasal drip and sneezing which may be associated with an allergic-like response. The belladonna alkaloids, hyoscyamine, atropine and scopolamine further augment the anti-secretory activity of Ru-Tuss Tablets

CONTRAINDICATIONS Hypersensitivity to antihistamines or sympathomimetics. Ru-Tuss Tablets are contraindicated in children under 12 years of age and in patients with glaucoma, bronchial asthma and women who are pregnant. Concomitant use of MAO inhibitors is contraindicated

WARNINGS Ru-Tuss Tablets may cause drowsiness. Patients should be warned of the possible additive effects caused by taking antihistamines with alcohol, hypnotics, sedatives or tranquilizers.

PRECAUTIONS Ru-Tuss Tablets contain belladonna alkaloids, and must be administered with care to those patients with glaucoma, or urinary bladder neck obstruction. Caution should be exercised when Ru-Tuss Tablets are given to patients with hypertension, cardiac or peripheral vascular disease or hyperthyroidism. Patients should avoid driving a motor vehicle or operating dangerous machinery (See Warnings).

OVERDOSAGE Since the action of sustained release products may continue for as long as 12 hours, treatment of overdoses directed at reversing the effects of the drug and supporting the patient should be maintained for at least that length of time. Saline cathartics are useful for hastening evacuation of unreleased medication. In children and infants, antihistamine overdosage may produce convulsions and death

ADVERSE REACTIONS Hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia may occur. Other adverse reactions to Ru-Tuss Tablets may be drowsiness, lassitude, giddiness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerotomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, dizziness and insomnia. Large overdoses may cause tachypnea, delirium, fever, stupor, coma and respiratory failure

DOSAGE AND ADMINISTRATION Adults and children over 12 years of age, one tablet morning and evening. Not recommended for children under 12 years of age. Tablets are to be swallowed whole

HOW SUPPLIED:

Bottles of 100 Tablets	NDC 0524-0058-01
Bottles of 500 Tablets	NDC 0524-0058-05

Federal law prohibits dispensing without prescription

DISTRIBUTED BY:
Boots Pharmaceuticals, Inc.
Shreveport, Louisiana 71106

MANUFACTURED BY:
Vitarine Company, Inc.
Springfield Gardens, New York 11413

RU-TUSS®

Expectorant

DESCRIPTION

Each fluid ounce of Ru-Tuss Expectorant contains

Codeine Phosphate	65.8 mg
(WARNING MAY BE HABIT FORMING)	
Phenylephrine Hydrochloride	30 mg
Phenylpropanolamine Hydrochloride	20 mg
Pheniramine Maleate	20 mg
Pyrilamine Maleate	20 mg
Ammonium Chloride	200 mg
Alcohol	5%

Ru-Tuss Expectorant is an oral antitussive, antihistaminic, nasal decongestant and expectorant preparation.

INDICATIONS AND USAGE Ru-Tuss Expectorant is indicated for symptomatic relief of upper respiratory congestion associated with pharyngitis, tracheitis, bronchitis, and allergic rhinitis. Also, for the temporary relief of symptoms associated with hay fever, allergies, nasal congestion and cough due to the common cold

CONTRAINDICATIONS Hypersensitivity to antihistamines. Concomitant use of an antihypertensive or antidepressant drug containing a monoamine oxidase inhibitor is contraindicated

Ru-Tuss Expectorant is contraindicated in patients with glaucoma, bronchial asthma and in women who are pregnant

WARNINGS Ru-Tuss Expectorant contains codeine phosphate, therefore, the patient should be warned of the potential that this drug may be habit forming. Ru-Tuss Expectorant may cause drowsiness. Patients should be warned of the possible additive effect caused by taking antihistamines with alcohol, hypnotics, sedatives and tranquilizers

PRECAUTIONS Patients taking Ru-Tuss Expectorant should avoid driving a motor vehicle or operating dangerous machinery (See Warnings). Caution should be taken with patients having hypertension, diabetes, hyperthyroidism and cardiovascular disease

Caution should also be used in patients with pulmonary, hepatic or renal insufficiency.

ADVERSE REACTIONS Ru-Tuss Expectorant may cause drowsiness, lassitude, giddiness, dryness of mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, tachycardia, hypotension, hypertension, faintness, dizziness, tinnitus, headache, incoordination, visual disturbances, mydriasis, xerostomia, blurred vision, anorexia, nausea, vomiting, diarrhea, constipation, epigastric distress, hyperirritability, nervousness, and insomnia. Overdoses may cause restlessness, excitation, delirium, tremors, euphoria, metabolic acidosis, stupor, tachycardia and even convulsions

DOSAGE AND ADMINISTRATION Adults: 1 or 2 teaspoonfuls, orally, every 4 hours, not to exceed 10 teaspoonfuls in any 24-hour period

Children 6 to 12 years of age: ½ the adult dose, not to exceed 6 teaspoonfuls in any 24-hour period. Children 2 to 6 years of age: ½ teaspoonful every 4 hours, not to exceed 3 teaspoonfuls in any 24-hour period. Children under 2 years of age: Use as directed by a physician.

HOW SUPPLIED: (16 fl. oz.)

Pint Bottles	NDC 0524-1010-16

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LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

In writing drugs with refill prescriptions I believe it is very important to state the time limitations of when the drug can be dispensed even if the number of refills is specified.

This might be true in many fields but it is particularly true in ophthalmology. A clear example is a child who had been given Neodecadron drops by an allergist for his ophthalmic condition. Ten months later the mother went to the pharmacist and said that she wanted some more of the medication and the pharmacist refilled it because there were two more refills so stated. The medication was used "three times a day for about six months." Fortunately no undesired side effects were observed in this patient.

I believe this is not the intention of the original physician and I do question if it was the best pharmaceutical care. The pharmacist however thought that he had very carefully followed the prescription orders of the doctor and apparently was at ease at having done so.

William J. Collis, M.D.

To The Editor:

How Did We Get Into All the Paperwork of Utilization Review and Quality Assurance?

To mention utilization review and quality assurance is to watch eyes glaze over and to create attitudes alternating between boredom and hostility. However, this jargon means a lot of time, hassle, and money both to us and to our hospitals. I wanted to know how all this paperwork came about, what the words mean, and then try to predict what will happen in the future. My belief is that by knowing the history of all these trends I can make a fairly accurate guess on where we are going both nationally and locally.

If we go back to a period when there was no review at all, then we go back before 1910. Then there was an oversupply of physicians, many medical schools were diploma mills, and widespread abuses were common such as fee-splitting, overservicing, and frank technical incompetence. So, medical leaders and the Carnegie Foundation responded with the famous Flexner report of 1910. Medical schools had to meet standards and many closed. Teaching facilities were periodically reviewed. The flow of medical graduates was restricted. Then, in 1912 the American College of Surgeons was founded. The surgeons were concerned about training programs for surgeons since many hospitals had grossly inadequate facilities and staff organization. They tried to get the American Medical Association to take up this issue, but this idea didn't work. So they set up their own hospital inspection and accreditation program. From 1925 until 1951 an increasing number of hospitals were inspected by the American College of Surgeons to be certified to train surgeons. A medical audit was practiced in the late 1940's consisted basically of going through the charts, summarizing indications, operations and complications, and then making some kind of informed judgment as to the necessity of the procedure or the skill with which it was carried out.[1] Studies of this type could reveal unnecessary surgical procedures or inadequate facilities. But, since peer review then was essentially a one on one chart review, the results could not readily be used to curtail the activities of an individual surgeon.

Meanwhile the AMA sponsored legislation for occupational safety, workers compensation and child labor, but opposed health insurance public or private. Health insurance was seen as a threat to private medical practice.

The great depression had a profound effect on an entire generation. The financial insecurity increased public support for any kind of a guarantee of medical care. The wave of disillusionment with the entire economic system included medical economics as well. Radical ideas unthinkable a few years earlier such as universal health insurance were planned and pushed by the labor unions and the Democratic party. To counter this push the AMA turned 180° and threw its weight behind voluntary health insurance. Prepaid medical insurance was relatively new. Justin Ford

Kimbell set up a prepayment plan for teachers to go to Baylor University Hospital in 1929. For 50 cents a month the school teacher was provided 21 days of hospitalization in a semiprivate room at Baylor. By 1932 community wide plans began to offer subscribers a choice of hospitals. By 1933 the plans began to coalesce and they adopted a blue cross as their symbol. Both the American Hospital Association in 1933 and the American Medical Association in 1938 endorsed the prepayment principle. Between 1940 and 1980, health insurance coverage grew from 9% to 80% of the population. The Blue Shield name and symbol was adopted in 1939. And so the stage was set for some kind of cost containment program since the most effective cost container, a farmer without insurance, was steadily decreasing.

Another system of medical security undoubtedly influenced by the great depression was the Kaiser Permanente System. This was and is both the first and about the most successful HMO, health maintenance organization. In response to the Kaiser Permanent prepaid system the California Medical Society responded with the Foundation for Medical Care. This foundation worked with the local medical society to make a contract with the local health insurance plans. The local insurance plans provide fee-for-service insurance, but their prices must be competitive with prepaid plans. The insurance companies have to curb at least the more obvious overservicing like unnecessary admissions, continued hospitalization for observation, etc. So they started utilization review, at first, with simple retrospective reviews of insurance claims. However, by the 1960's extended stay reviews and even prehospital certification programs were introduced. The experience would later form the models for PSRO review in the 70's. The important concept is to realize that the meaning of utilization review and the quality of care were changed. Utilization review used to mean checking a test or procedure and finding out how many times it was ordered or done, how much it cost, and judging if efficiency or costs could be improved. Now it is a review of the services of an individual physician or physicians carried out in behalf of health insurance funds to save these insurance funds money.

Meanwhile in 1951 the AMA, American College of Surgeons, American College of Physicians, and the American Hospital Association founded the JCAH, Joint Commission for the Accreditation of Hospitals, to supplement and broaden the American College of Surgeons Hospital Approval Program. Originally the standards were aimed at a minimal level of care and the emphasis was on structure rather than the process of care or the outcome of care. The quality assurance was taken care of by various committies such as tissue, infection, etc. The trends, however, would make the JCAH both more comprehensive and more medically oriented. The leaders of the JCAH realized that organizational structure like having a tissue audit committee or a delineation of clinical privilege (introduced in the 50's) did not prevent overservicing. New methods were required.

The art of medical review goes at least as far back as 1918 when a surgeon at the Massachusetts General Hospital named Codman tried to establish an "end results" system.[2] Here all post-operative cases would be reviewed 12 months after surgery. The obvious plan is to find surgeons with a high complication rate. The idea got nowhere. The next big advance in auditing was in 1956[3] by Lembecke who studied pelvic surgery in women. He used textbooks and recognized medical experts to make up a series of standard indicators. Then he could review charts and compare them to these standards. He stated approximately 70% of the operations were "unjustified" according to these standards. Then he anonymously fed this data back to the involved surgeons and reaudited them. The reaudit revealed the rate of "unjustified" operations had fallen to 20%. Lembecke's methods of criteria auditing grew in the 50's and became linked with the system of delineation of privileges. Since the criteria were not personal opinion or subjective, then department heads, medical staff or even nonphysicians such as administrators or medical boards could use Lembecke's methods to limit or even deny physicians surgical or hospital privileges. Until the 1960's all this was within the medical family. The driving force was the JCAH, the societies of specialists, and prestigious physicians from prestigious medical institutions. The Kennedy assassination and LBJ's Great Society would become responsible for the direction we took in the 1960's. And criteria auditing can be used by a physician, an administrator, or the U.S. Government.

The path to Medicare, Medicaid and PSRO goes as far back as the depression when Franklin Delano Roosevelt thought of including medicare care in the original Social Security legislation. The AMA was opposed and successfully fought against any form of what was called socialized medicine. Roosevelt was persuaded not to include medical care in social security. Truman had his Wagner-Murray-Dingell proposal for national health insurance defeated in 1943 and 1952, and Kennedy had his King-Anderson will defeated in 1962 by a narrow vote of 52-48. Then an assassin's bullet placed Lyndon Baines Johnson as President. He wanted Medicare probably even more than Kennedy and using his long experience as ma-

jority leader of the Senate knew how to get what he wanted. The Republicans nominated Barry Goldwater in 1964, and the LBJ landslide that followed gave the Democrats two-one margin in both houses. The 1965 passage of Medicare and Medicaid is considered the AMA's biggest defeat in health legislation. Other Great Society programs passed through Congress easily. Theodore White[4] notes in his book, *America in Search of Itself: The Making of the President 1956-1980,* three facts about all these programs. The first is all passed in the name of virtue. Congress didn't pick out the best program, they passed all of them. The second fact was the cost overruns of all these programs. The disability insurance amendment to Social Security was supposed to cost $860 million in 1980. In fact, it cost over $15 billion in 1980. The third fact was that every program created a permanent staff of bureaucrats. Mr. White suggests that eventually these bureaucrats will be controlled by the interests they are supposed to regulate. But the vote for Medicare was a vote against physicians and the AMA. Interestingly enough, the AMA supported 24 out of 32 bills submitted by Kennedy. Of the eight not supported, seven of these were not supported by Kennedy.[5] The exception: Medicare.

Medicare was written to fit the fee-for-service mold. No spending limits were mentioned. The more services an individual practitioner, or a hospital, or a contract company could provide the more they would be paid. Physicians are concerned about curing their patients regardless of cost. But they get paid more as do the hospitals if they use more services to cure these patients. Cost overruns might have been expected on this basis alone.[6] Several other factors added to medical expenses in the decade after 1965. Inflation alone accounted for a 70% increase. Medical technology included the growth of intensive care units and continuous monitoring, the growth of cardiac surgery, the growth of renal dialysis, and the growth of computerized axial tomography, to touch only a few of the major breakthroughs. All of these advances added to expenses. Congress expanded both Medicare and Medicaid, expanded the military coverage in 1966 to include retirees and their dependents, and through matching programs forced states and local governments to spend more. In 1965 Medicare was projected to cost $4.3 billion in 1975. The actual figure was $11.7 billion. Total federal expenses went from $4 billion in 1965 to $59 billion in 1980, or 6.2% to 9.1% of the gross national product. The cost became second only to national defense. Against, this background, the government met to act on bringing health care spending under control. Congressional testimony prior to the enactment of the Social Security amendments of 1972 reveals a strong interest in controlling health care costs by eliminating unnecessary services. The law itself was written to do this but is written with this goal in the context of quality control. In other words, to sell the program and win cooperation of physicians, quality assurance was emphasized, but the Senate Finance Committee was concerned about costs. The 165 pages of amendments to the Social Security Act directed the Secretary of HEW to create a national system of Professional Standards Review Organization (PSRO).

PSRO used the review techniques patterned after those used by the California Medical Society's "Foundation for Medical Care." The differences were in size, scope, power and importance. PSRO was nationwide and used fairly uniform norms and standards on a nationwide basis. Previously utilization review varied, usually from hospital to hospital. PSRO is a structured organization which soon developed its own bureaucracy. Although it is physician sponsored, the power to grant or revoke a charter rests with HEW, as does the funding. Its power to deny payments to both hospital and/or physicians made it controversial and unpopular among physicians from the very start. Physicians like others, specialize in production and diversify in consumption. PSRO had the power not to pay them if their production didn't fit the norm, or put another way, PSRO had the power to force them to practice in ways that they considered contrary to their own interests and that of their patients. PSRO will continue to be both controversial and unpopular for this reason regardless of what previous, present, and future studies show about its effectiveness. The consensus seems to be, that a PSRO can police a physician who gets too far from the norm.[6,7,8,9] In Kentucky, KPRO is cost effective, savings are more than costs, but when these savings are viewed against the huge Medicare/Medicaid bills the percentage is quite modest.

One unanticipated effect of PSRO is on the English language. One can not "assure" the federal government of "quality" in medical care. One can review any number of things to save the federal government money, and this includes the services of an individual physician. To quote Humpty Dumpty, "When I use a word it means just what I choose it to mean-neither more or less." Quality assurance really doesn't relate to either quality or assurance. It does relate to the federal government and to money.

PSRO became the General Motors of the reviewing industry but Medicare/Medicaid increased the scope, power, and extent of the review activity of the JCAH as well. JCAH approved hospitals were au-

tomatically eligible for Medicare payments, so the influence of the JCAH was greatly boosted. The leaders of the JCAH accepted their role as government agent. To do this they had to rewrite their standands to include a form of review credible to the government. The basic "assurance" is to insure that their approved hospitals provided value for Medicare/Medicaid money. By the 1970's a JCAH approved hospital had to carry out so many audits a year, one from every department, and certain percentage of certain types of patients had to be audited. Because the audits before were really for surgery, "minimum acceptable" standards were sufficient. But when the audits were for cost control for Medicare/Medicaid, the "optimal achievable" standards were necessary. These audits are both more strict and more complicated. The new trend now is to do less criteria audits based on process standards (what should be done to patients) and more criteria audits based on outcome standard. And besides all the audits, the JCAH still inspects structures as well. Nor is there any escape for hospitals and hospital staffs in not becoming JCAH approved. State licensure is still required for Medicare/Medicaid. This inspection now requires utilization review and quality assurance audits although the focus of a state licensure exam is still structural. However, if PSRO ever falters, both JCAH and state licensure will pick up much of the slack.

Review activity had and will continue to increase for Blue Cross-Blue Shield and the private insurance companies. The open ended fee-for-service aspect of practically all these plans creates a need for some sort of cost control. In the 12 years following the Medicare/Medicaid in 1965 the health insurance payments of General Motors increased from $170 million to $1.2 billion. The costs of health protection to manufacture a car exceeded the cost of steel or any other material. In 1979, Chrysler stated its health insurance cost per employee per year was $2,600. Car prices had to go up to pay for this and of course when car sales went down employees had to be laid off. A rather similar story could be written for any other industry. The net result is to make businessmen, union leaders, and even the public at large demand that something be done about health care costs. Today this demand translates into reviewing physicians, hospitals, procedures, and so on. Medical review and its attendant paperwork appears to have become an integral part of our practice.

I wrote this paper to find out how and why all this review paperwork came about. Once you know the history you can often give intelligent predictions about the future.

My first conclusion is that health care costs will continue to increase. All the reasons which were present in the 60's and 70's are still present. New medical breakthroughs and medical technology will undoubtedly increase, not decrease costs. In addition, we will have more people, more older people, more physicians, more shortage of nurses and more inflation. The reasons for medical costs to come down are all controversial. Will there really be less disease because of diet, exercise, or less smoking? Will new drugs decrease the amount of cholecystectomies like they did gastric resections? Will the estimated increase in failures of small hospitals from 15 per year to 30 per year really decrease medical costs? Will HMO's (health maintenance organizations), IPA's (individual practice associations), and PCN's (primary care networks) take over enough patient care to decrease costs? Will the government be able to decrease health benefits? All the reasons for costs to come down are controversial. All reasons for medical costs to go up seem definite.

Because medical costs will continue to rise both in absolute value and as a percentage of the gross national product, the payers will demand further controls on costs. This is my second conclusion. I believe that reviews and audits will continue to increase regardless of what happens to PSRO. More reviews will be done using more strict criteria and they may well be done by computers and non-medical personnel instead of PSRO physicians. Or the reviews will be done by HMO's, IPA's, and PCN's if we have effective "pro-competition" legislation and/or some sort of CCHP (Consumer Choice Health Plan). The idea of some third party snooping through records and looking for a reason not to pay you and me seems to be a permanent fixture in our American system of medicine. I only hope physicians will understand and control this process.

Frank K. Sewell, Jr., M.D.

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LETTERS

To The Editor:

I know from talking to physicians around the state that the medical profession in Kentucky is undergoing a lot of change today. No one can doubt that the way health care in this country is delivered is changing and will continue to evolve in the years ahead. One of the reasons this change is occurring is because of pressures from Government, insurers, and businesses who have all become alarmed at the growing cost of providing medical care. All three of these groups have played a part in bringing a change to the way health care is delivered.

I have seen the impact the growing cost of medical care has had from a couple of vantage points. In the private sector, business executives see the health insurance portion of their employee benefits costs rising steadily every year. This has led to the formation of business coalitions throughout the country searching for ways to hold down the rising cost of health care. Government at all levels is doing the same. When I took office, the annual cost of providing medical care at the state level was about $285 million. This year it will exceed $400 million. This trend cannot continue. Government cannot afford to spend an ever increasing percentage of its revenues on health care at the expense of other vital programs. It is simply a matter of dollars and cents.

Now in Kentucky we have started a revolutionary approach to resolving this problem, an approach that will help save taxpayer dollars but will also bring better medical care to the people that need the care the most.

Doctor Grady Stumbo, former secretary of the State Department of Human Resources, made great progress in the last few years in reducing the escalating cost of Medicaid to the state. But providing care for the medically indigent has become an increasingly serious problem, particularly in Jefferson County as we prepare to open the new University of Louisville hospital. That is why Dr. Stumbo proposed a new system of paying for medical care for poor people in Jefferson County called Citicare. Citicare will increase the number of people with medical coverage and yet hold down costs through a more cost effective reimbursement system, and the establishment of neighborhood health centers that offer primary care.

Humana Inc. recently took the first step in launching the program by opening the first of as many as three neighborhood health centers. Humana has offered to construct and equip the centers, donate its management expertise to run them, and absorb all losses for their first three years of operation. Meanwhile, the University of Louisville School of Medicine has agreed to provide the physicians to staff the center.

The establishment of the neighborhood centers is of particular significance because, at present, many people in Jefferson County without medical coverage go to the University of Louisville hospital, often to receive primary medical care. Not only does that result in treatment being offered in a more expensive setting than necessary, but it also creates an image of the University of Louisville hospital as a charity hospital and therefore does not attract the privately insured patients that the hospital needs to succeed without increasingly greater government subsidies.

That is what makes Humana's proposal so bold and selfless. Humana, which has three hospitals in Louisville, has agreed to spend millions of dollars to open and operate for three years neighborhood health centers that will offer primary medical care to the indigent. The centers will be called ACCESS and University of Louisville physicians will be on staff 12 hours a day, seven days a week to treat all patients, regardless of ability to pay. In the unlikely event that the ACCESS centers make a profit, Humana will donate that money to the University of Louisville School of Medicine.

The first center opened in September at the intersection of Roy Wilkins Avenue (formerly Ninth Street) and Broadway in downtown Louisville. It has 4900 square feet with eight examination rooms, two treatment areas for minor emergencies, a laboratory and an x-ray room. All patients are treated with dignity and compassion and receive high quality medical care in a timely manner and in a comfortable setting. We believe that with Humana's strong consumer orientation and the high caliber of physicians from the University of Louisville, patients will have a real incentive to seek primary medical care at ACCESS rather than at a more expensive hospital emergency room.

The degree of public and private sector cooperation that made ACCESS possible is truly astounding. Doctor Stumbo first proposed the concept of neighborhood health centers as a way to reduce the cost of providing care for the medically indigent. Humana offered its financial resources and management expertise to open and operate the centers. The University of Louisville agreed to provide the physicians to staff ACCESS. A Clinics' Committee determined the need for the location of this first center, and was composed of representatives from the State Department of Human Resources, the Louisville-Jefferson County Medical Society, the Falls City Medical Society, the Metropolitan Hospital Council, the Uni-

versity of Louisville School of Medicine, Park Duvalle Community Health Center, and Humana Inc.

I commend all of the organizations and individuals who had a part in this project. I am convinced that the joining together of the public and private sectors to develop this innovative solution to the serious problem of providing care to the medically indigent will become a model, not just in Kentucky, but in the United States as well.

Governor John Y. Brown

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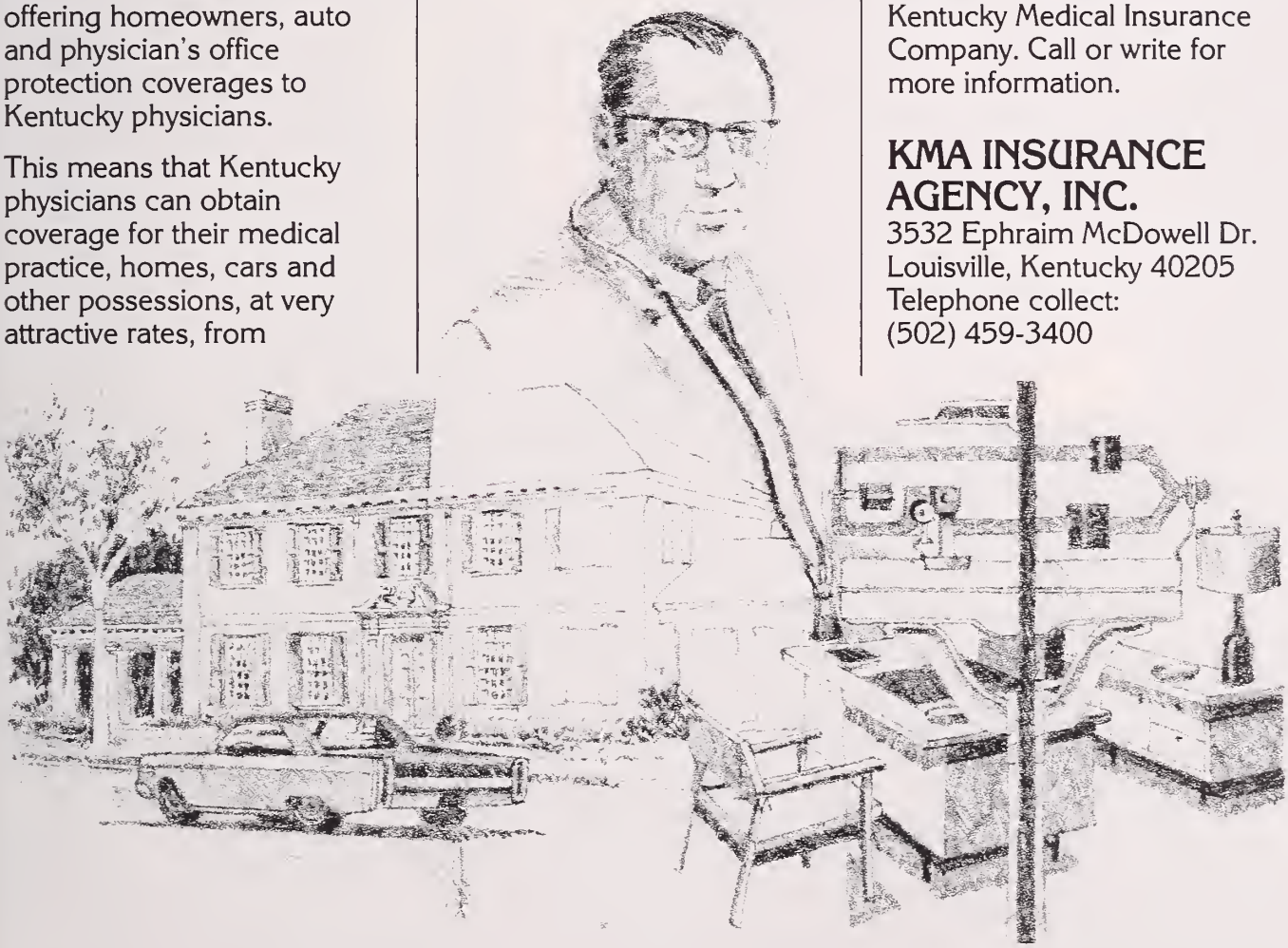
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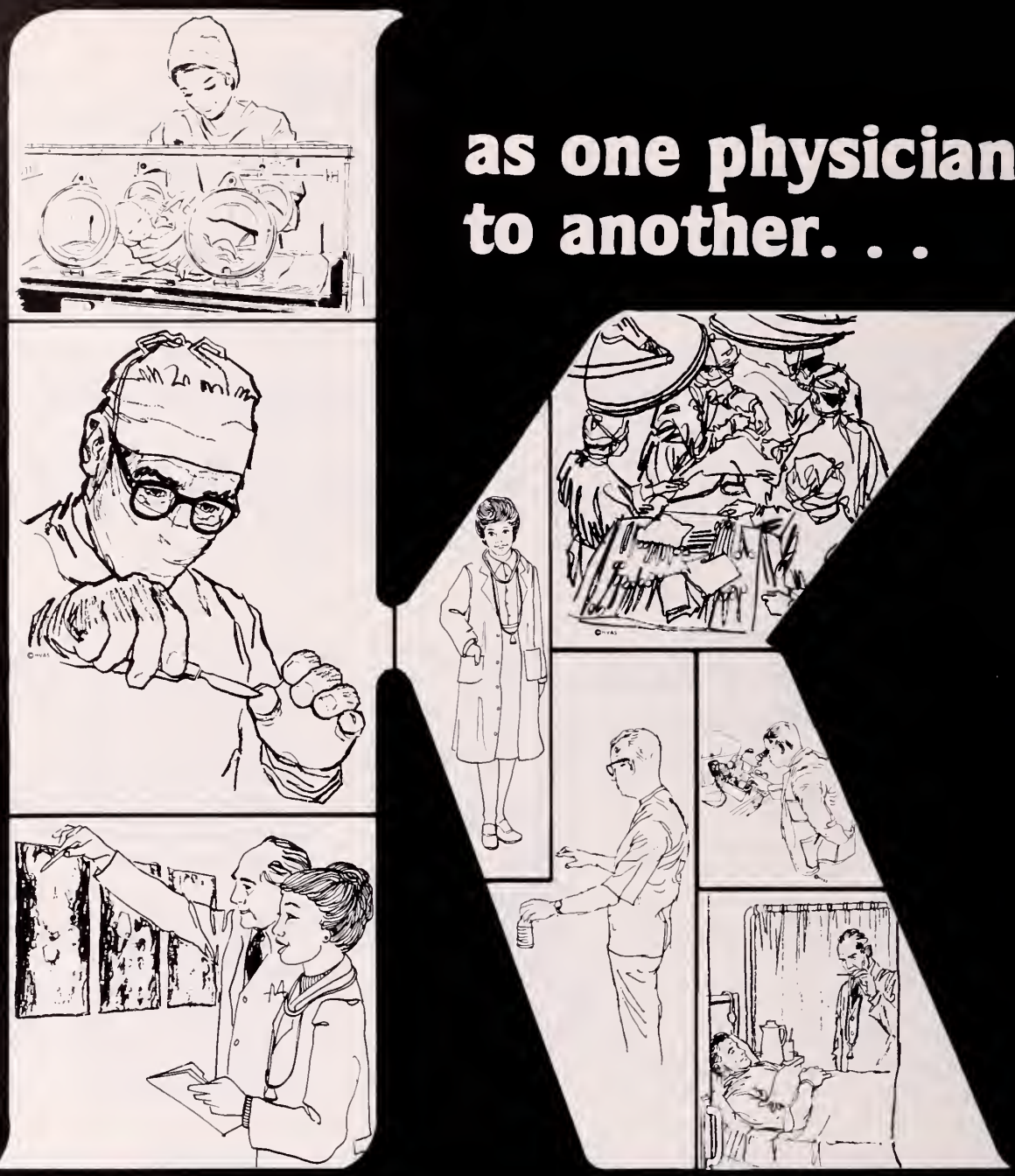
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J-9043-4 July 1981



In the treatment of insomnia

Good mornings start with restful nights.

Dalmane *(flurazepam HCl/Roche)* patients fall asleep faster, sleep longer and seldom awaken with morning hangover.

Feeling well rested in the morning usually means having slept well the night before. And for insomniac patients receiving hypnotic therapy, a good morning also means awakening with few side effects from their medication. Many physicians choose Dalmane for their patients who suffer from insomnia for this very reason.

Aside from enabling patients to fall asleep more quickly and sleep longer, Dalmane seldom causes morning hangover. Most Dalmane patients feel alert and refreshed when they awaken. In 53 paired-night clinical studies comparing Dalmane and placebo in 2010 insomniac patients with a variety of secondary diagnoses, most Dalmane patients awakened more alert and refreshed, and less groggy and drowsy, than on nights when they had taken only placebo.[1] In a double-blind crossover study of 42 patients in private practice, approximately three times as many patients reported feeling refreshed and alert upon awakening after a night on Dalmane (flurazepam/Roche) compared to placebo nights.[2] This difference was highly significant ($p<0.001$). And a retrospective study of 2542 hospitalized patients who received Dalmane revealed only a 3.1% incidence of side effects.[3]

While residual effects from Dalmane therapy are infrequent, patients should be cautioned about drinking alcohol, driving or operating hazardous machinery after ingesting the drug.

Efficacy and safety in a broad range of patient types.

Over 2000 clinical trials involving more than 10,000 patients have shown that Dalmane patients fall asleep sooner, sleep longer and experience fewer nocturnal awakenings.[4] The safety and efficacy of Dalmane have been demonstrated in medical and surgical hospitalized patients, in patients seen in office practice and in elderly patients.[5-8] Since the risk of oversedation, dizziness, confu-

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sion and/or ataxia increases with larger doses in the elderly, it is recommended that the dosage be limited to 15 mg.

Moreover, the efficacy and safety of Dalmane for the treatment of insomnia have been demonstrated in thousands of patients with a variety of primary medical conditions, including cardiovascular, neuropsychiatric, endocrine-metabolic, gastrointestinal, genitourinary, respiratory and musculoskeletal disorders.[1] Dalmane (flurazepam HCl/Roche) is contraindicated in pregnancy and in patients hypersensitive to the drug.

Avoids rebound insomnia upon discontinuation.

Rebound insomnia—a worsening of sleep beyond pretherapy levels after drug discontinuation—has been reported as a potential clinical problem with some hypnotics.[9,10] However, this problem has not been reported with Dalmane. In eight out of eight sleep laboratory studies, there were no reports of rebound insomnia.[11] When you prescribe Dalmane, you can be confident of efficacy that enhances therapeutic progress. Your insomniac patients can be assured of a restful night, night after night—a good start for a good morning.

References: **1.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **2.** Zimmerman AM: *Curr Ther Res 13*:18-22, Jan 1971. **3.** Greenblatt DJ, Allen MD, Shader RI: *Clin Pharmacol Ther 21*:355-361, Mar 1977. **4.** Data on file, Hoffmann-La Roche Inc., Nutley, NJ. **5.** Meyer JA, Kurland KZ: *Milit Med 138*:471-474, Aug 1973. **6.** Feffer HL, Gibbons B: *Med Times 101*(8):130-135, Aug 1973. **7.** Jacobson A *et al*: *Psychophysiology 7*:345, Sep 1970. **8.** Frost JD Jr, DeLucchi MR: *J Am Geriatr Soc 27*:541-546, Dec 1979. **9.** Kales A, Scharf MB, Kales JD: *Science 201*:1039-1041, Sep 1978. **10.** Kales A *et al*: *JAMA 241*:1692-1695, Apr 1979. **11.** Monti JM: *Methods Find Exp Clin Pharmacol 3*(5):303-326, 1981.

For efficacy from the beginning to the end of therapy

15-mg/30-mg capsules



Dalmane® (IV)

flurazepam HCl/Roche

stands apart

Please see following page for summary of product information.

Dalmane®(IV)

flurazepam HCl/Roche

15-mg/30-mg capsules

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Objective sleep laboratory data have shown effectiveness for at least 28 consecutive nights of administration. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended. Repeated therapy should only be undertaken with appropriate patient evaluation.

Contraindications: Known hypersensitivity to flurazepam HCl; pregnancy. Benzodiazepines may cause fetal damage when administered during pregnancy. Several studies suggest an increased risk of congenital malformations associated with benzodiazepine use during the first trimester. Warn patients of the potential risks to the fetus should the possibility of becoming pregnant exist while receiving flurazepam. Instruct patient to discontinue drug prior to becoming pregnant. Consider the possibility of pregnancy prior to instituting therapy.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. An additive effect may occur if alcohol is consumed the day following use for nighttime sedation. This potential may exist for several days following discontinuation. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Potential impairment of performance of such activities may occur the day following ingestion. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, abrupt discontinuation should be avoided with gradual tapering of dosage for those patients on medication for a prolonged period of time. Use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated patients, it is recommended that the dosage be limited to 15 mg to reduce risk of oversedation, dizziness, confusion and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in severely depressed patients, or in those with latent depression or suicidal tendencies, or in those with impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins, and alkaline phosphatase; and paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg recommended initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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This ad is for all those who ever wonder where the money goes.

Her name is Dana. And, she was born with impaired hearing. But this year, thanks to the therapy she will receive at her local hearing and speech center, she'll be able to clearly hear the world around her for the first time.

If you're from her hometown, your gift to your local United Way went to help make this possible. And, it was also used to help thousands of others in your community who need help.

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Doctor Holloway Is Chosen President-Elect During KMA Annual Meeting

James B. Holloway, Jr., M.D., Lexington, was elected to the office of President-Elect by the House of Delegates during the 132nd KMA Annual Meeting. A general and thoracic surgeon, Doctor Holloway has served KMA in many capacities including two terms as Chairman of the Board of Trustees.

More than 1,800 attended this year's KMA Annual Meeting in Lexington. Medical authorities from across the nation discussed topics on the theme of "Emergency Medicine."

Other new officers of the KMA include: Richard F. Hench, M.D., Lexington, elected to a consecutive term as Chairman of the Board of Trustees; Donald C. Barton, M.D., Corbin, Vice Chairman of the Board for 1982-83. Harold D. Haller, Sr., M.D. and Kenneth P. Crawford, M.D., both of Louisville, were reelected respectively as AMA Delegate and Alternate Delegate.

Wally D. Montgomery, M.D., First District Trustee and Robert E. Smith, M.D., Eighth District Trustee, were both named to the Executive Committee.

The House of Delegates also elected three new Trustees: Albert H. Joslin, M.D., Owensboro, District 2; R. Kendall Brown, M.D., Georgetown, District 9 and Garner E. Robinson, M.D., Ashland, District 13.

A special feature highlighting events during the Annual Meeting as well as the official Digest of Proceedings of the House of Delegates will be published in the December *Journal of KMA*.



During the second meeting of the House of Delegates, James B. Holloway, Jr., M.D., Lexington, accompanied by his wife, accepted the office of President-Elect for 1982-83.



After being installed as 1982-83 President of the KMA, Dwight L. Blackburn, M.D., Berea, right, presented the past President's Plaque to Ballard W. Cassady, M.D., Pikeville.

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Why Your Health Insurance Costs More

Last winter the monthly premium for the KMA endorsed Kentucky Blue Cross and Blue Shield plan went up significantly. As a result, the Executive Committee of the Board asked the KMA Committee on Medical Insurance and Prepayment Plans to make an indepth study of the utilization of the KMA plan and report its findings.

A study was made by Blue Cross Blue Shield of a representative number of cases for the period November 1980 through April 1982. The study included a breakdown of admission by diagnostic category; a breakdown based on percentage of surgical, maternity and medical cases; the most prevalent diagnoses; and admissions by age category. Blue Shield also reviewed our group's higher cost cases to determine if there was any unusual pattern developed either from usage by the physician's office staff and family, or the physician, or physician's family; physician's specialty, location and diagnosis on admission.

This review did not indicate any specific area of inappropriate utilization. The group's utilization breakdown compared favorably to that of the rest of the state in all areas except cost per case and cost per day. We then asked Blue Cross Blue Shield to see if they could determine why KMA's group showed a higher cost per case and cost per day.

It was reported that their studies showed a high number of short stay cases (of 1-2-3 day duration), many without evidence of definitive treatment. The percentage of these types of cases in the KMA sample studied was 62% compared to a statewide average of 45%.

There was a high utilization of ancillary services in the KMA group. Although the number of admissions of physicians and their families and office employees and their families were approximately equal, the utilization of ancillary services was higher for physicians when compared to both office employees and statewide averages.

Approximately 10% of the surgical claims submitted were for procedures which Blue Shield would pay for if done on an out-patient basis. However, the majority of surgery was done on the day of admission or within one day of admission.

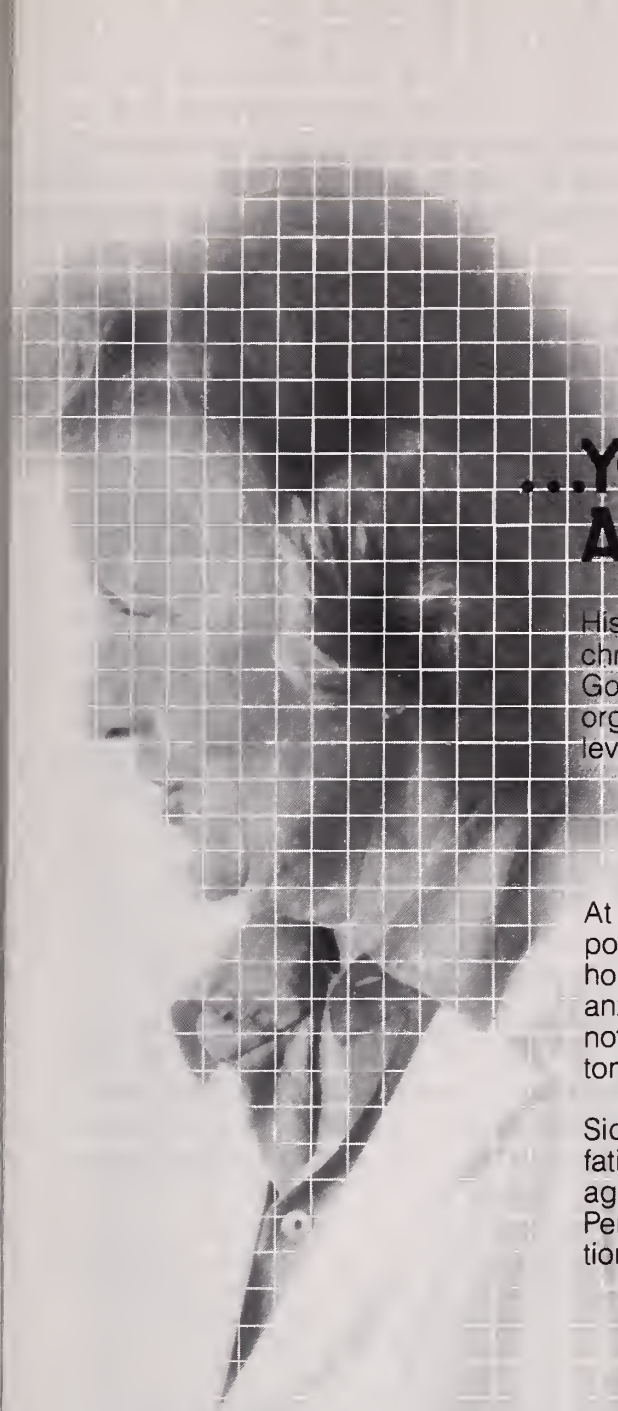
The KMA Committee on Medical Insurance and Prepayment Plans feels that the high percentage of short stay cases is a significant utilization factor influencing our group costs. We feel that the unusually high amount of ancillary services performed may indicate a misunderstanding of the benefit structure whereby individuals feel they must be hospitalized in order for the service to be paid. Finally, a greater awareness and a greater utilization of ambulatory surgical coverages may result in significant savings to our group.

The rates for the KMA endorsed Blue Cross Blue Shield group plan are set by the experience of the KMA group. We are not rated with other businesses, we are not rated with hospitals—we stand alone. Thus, the increase in rates are the result of an increase in the utilization of our plan by physicians and their families, and office employees and their families. What group could possibly be in a better position to see that our plan is utilized appropriately?

Earl P. Oliver, M.D.
Chairman, Committee on
Medical Insurance and
Prepayment Plans

THE PATIENT THINKS HE HAS HEART TROUBLE...





...YOU KNOW IT'S REALLY ANXIETY SYMPTOMS

His presenting symptoms: palpitations, chest pain, chronic exhaustion and occasional difficulties in breathing. Good reason for concern. A complete workup uncovers no organic dysfunction, but it *does* reveal excessively high levels of anxiety and apprehension.

For rapid relief you prescribe Valium (diazepam/Roche)

At times like this, Valium (diazepam/Roche) can be a potent therapeutic ally. It works promptly. Within just a few hours, the patient begins to feel calmer. And in a few days, anxiety relief not only becomes more pronounced but a noticeable reduction in anxiety-generated somatic symptoms also occurs.

Equally important, Valium is generally well tolerated. Side reactions more serious than drowsiness, ataxia and fatigue are rare. Patients should, of course, be cautioned against driving or drinking alcohol while on Valium therapy. Periodic reassessment of the need for antianxiety medication should also be performed.

VALIUM® (IV)
diazepam/Roche

2-mg, 5-mg, 10-mg scored tablets

BECAUSE YOU'RE CONVINCED THE PATIENT NEEDS IT

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Please see summary of product information on the following page.

VALIUM® (diazepam/Roche)

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Management of anxiety disorders, or short-term relief of symptoms of anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic. Symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal, adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome; convulsive disorders (not for sole therapy).
The effectiveness of Valium (diazepam/Roche) in long-term use, that is, more than 4 months, has not been assessed by systematic clinical studies. The physician should periodically reassess the usefulness of the drug for the individual patient.

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms similar to those with barbiturates and alcohol have been observed with abrupt discontinuation, usually limited to extended use and excessive doses. Infrequently, milder withdrawal symptoms have been reported following abrupt discontinuation of benzodiazepines after continuous use, generally at higher therapeutic levels, for at least several months. After extended therapy, gradually taper dosage. Keep addiction-prone individuals under careful surveillance because of their predisposition to habituation and dependence.

Usage in Pregnancy: **Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.
The clearance of Valium and certain other benzodiazepines can be delayed in association with Tagamet (cimetidine) administration. The clinical significance of this is unclear.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported, should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

Dosage: Individualize for maximum beneficial effect. *Adults:* Anxiety disorders, symptoms of anxiety, 2 to 10 mg b.i.d. to q.i.d., alcoholism, 10 mg t.i.d. or q.i.d. in first 24 hours, then 5 mg t.i.d. or q.i.d. as needed; adjunctively in skeletal muscle spasm, 2 to 10 mg t.i.d. or q.i.d.; adjunctively in convulsive disorders, 2 to 10 mg b.i.d. to q.i.d. *Geriatric or debilitated patients:* 2 to 2½ mg, 1 or 2 times daily initially, increasing as needed and tolerated. (See Precautions.) *Children:* 1 to 2½ mg t.i.d. or q.i.d. initially, increasing as needed and tolerated (not for use under 6 months).

How Supplied: For oral administration, Valium scored tablets—2 mg, white; 5 mg, yellow; 10 mg, blue—bottles of 100* and 500;* Prescription Paks of 50, available in trays of 10.* Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25;† and in boxes containing 10 strips of 10.†

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IN MEMORIAM

R. O. JOPLIN, M.D.
1902-1982
Louisville

Robertson O. Joplin, M.D. died August 21 at St. Anthony Hospital in Louisville. Doctor Joplin was a general surgeon and had practiced for 55 years. He was a 1927 graduate of the Medical Department of the University of Louisville, and had been a former president of the Jefferson County Medical Society and president of the Louisville Surgical Society and vice president of the Kentucky Surgical Society. He had also been president of the Kentucky chapter of the American College of Chest Physicians. Doctor Joplin was a member of the American College of Surgeons, the American Medical Association, the Jefferson County Medical Society and had been a member of KMA since 1952.

JAMES O. H. SIMRALL, M.D.
1909-1982
Louisville

James O. H. Simrall, M.D. died September 8, at Norton Hospital. Doctor Simrall was an obstetrician and gynecologist and had also taught at the University of Louisville for 20 years. He was a 1935 graduate of Harvard Medical School. Doctor Simrall was a member of the American Medical Association, the Jefferson County Medical Society and had been a member of KMA since 1952.

WILLIAM HOLTON CARTMELL, M.D.
1902-1982
Maysville

William Holton Cartmell, M.D. died August 1. Doctor Cartmell was a 1930 graduate of Rush Medical College in Illinois. He was a surgeon and had been a member of KMA since 1931.

SAM H. BLACK, M.D.
1904-1982
Louisville

Sam H. Black, M.D. died August 30 at his home in Louisville. Doctor Black was a 1926 graduate of the Medical Department of the University of Louisville and a pathologist at the old St. Joseph Infirmary for 30 years. He was a member of the Jefferson County Society, American and Southern Medical Associations, the Kentucky and American Societies of Clinical Pathology and a member of KMA since 1952.

1981-82 Annual Report
Kentucky State Board of Medical Licensure

On September 1, the Kentucky State Board of Medical Licensure celebrated its 10th anniversary. Prior to its creation in 1972 all medical and licensure functions were handled by the State Board of Health.

Over the past decade the medical licensure headquarters office has been located in Louisville. The office handles the day to day administrative responsibilities of the Board which include the processing of all applications for medical and osteopathic licensure as well as coordinating all investigations and legal activities of the Board. At the present time the Board maintains five full time employees to handle the administrative activities. Since 1980 the State Attorney General's office has provided legal assistance and the Cabinet for Human Resources has provided the Board with investigative service on a part-time basis.

On an average the Board holds six day-long meetings a year. In addition to reviewing applications for licensure at these meetings the Board also reviews all matters relating to medical discipline of physicians holding licenses to practice medicine or osteopathy in the state. Approximately 20 cases annually result in disciplinary action being taken by the Board. Following disciplinary proceedings on the charges brought against a physician the Board can place a physician's license on probation or suspension or can choose to revoke his license.

In recent years the Board has realized the need to become more active in the medical discipline of physicians. In order to do this the Board has found a need for additional legal services. It has therefore requested the Attorney General to assign a full time attorney to assist the Board in its legal proceedings against physicians' licenses. It is the hope of the Board that with additional legal assistance it will be able to handle disciplinary matters more expeditiously in the future.

To assist it in disciplinary matters the Board is now in the process of employing its own investigators and physician/consultants. Within the next few months the Board hopes to have a minimum of two full-time investigators and two or three physicians under contract to assist in reviewing physician records to determine appropriateness of care and professional competency. Efforts are now being made to have reported to the Board all disciplinary action taken by courts, hospitals and medical societies regarding physicians.

In an effort to keep interested parties advised of disciplinary action taken by the Board, lists of names of physicians whose licenses have been revoked, placed on probation or been suspended will be published periodically. This information will be distributed to all physicians in the state, hospitals, medical societies and pharmacies. It is the hope of the Board that by doing this the public will be kept better informed of physicians with disciplinary problems.

In another area the Board continues to struggle with the problem of evaluating graduates of foreign medical schools who are applying for medical licensure in the state. The Board has made recommended changes in the approval of medical schools outside the United States and Canada. The Board is now in the process of developing a list of foreign medical schools which provide equivalent training to medical schools in the United States and Canada. Once this list has been completed only graduates from these approved schools will be considered for licensure.

The Board continues to administer the state medical exam twice a year to eligible candidates seeking medical licensure in the state. The three-day exam is given in June and December in Louisville.

Again in 1981-82 the Board administered the state paramedic program. At the present time there are 218 active certified paramedics working for advanced life support providers in the state. The Board's Paramedic Advisory Committee meets on an average of six times a year and administers the state paramedic certification exam in April and October of each year. The Board, working through its advisory committee, continues to emphasize strong medical control in its paramedic programs located throughout the state.

A review of some of the other services rendered by the Board during the past fiscal year shows 5,256 physicians in the state renewing their medical licenses, 482 physicians out of the state renewing their licenses, 671 new medical licenses being issued, 110 paramedics being recertified, 52 new paramedics being certified, 37 limited licenses to practice medicine in the state being renewed and 13 new osteopathic licenses being issued.

As you can see from this brief report the activities of the State Board of Medical Licensure continue to increase. Much progress has been made during the past 10 years and many new challenges remain ahead. This Board looks forward to these challenges in the future in order to enhance the quality of medicine being practiced in the state.

John C. Quertermous, M.D.
President

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All advertisements must be approved by the Board of Editors. Deadline is the first of the month preceding the month of publication.
Charges for advertising are: 20¢ per word. Average word count: 7 words per line. $5.00 minimum. Send payment with order to:

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"...particularly effective in soft tissue disorders including sports injuries,"[1] Rufen stops pain at the site of injury and inflammation, not at the level of central perception. There is no dulled sensorium, no special need for warnings about driving or cautions about use of machinery. Your patient gets fast, effective pain relief...potent anti-inflammatory action...excellent tolerance...*plus* the exceptional economy that only Rufen offers. Next time one of your patients asks for pain relief, let Rufen show you how it measures up.

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Measure RUFEN® (ibuprofen) against "standard" mild to moderate pain

Dental pain and episiotomy pain are predictable, reproducible "standards" that make possible objective comparisons of effectiveness of different analgesic agents.

- Measured against 15, 30 and 60 mg doses of codeine phosphate in a double-blind study of 287 patients, 400-mg doses of ibuprofen proved "significantly better than codeine on almost all pain intensity, degree of relief and duration of analgesia parameters."[2]
- Measured against a propoxyphene-acetaminophen combination for pain relief after 3rd molar extractions, ibuprofen proved equally effective and caused fewer side effects. Ibuprofen was associated with faster recovery, evidenced by more rapid reduction of trismus and return to normal function.[3]
- Measured against post-episiotomy pain in 30 patients, "ibuprofen was effective in treating the swelling as well as pain...during the first and worst days. Therefore, it is not only the analgesic but also the anti-inflammatory effect of ibuprofen that are the beneficial factors..."[4]

Measure RUFEN® (ibuprofen) against any mild to moderate pain

RUFEN	Acetaminophen + codeine combinations
• single-entity, peripheral-acting analgesia	• combined drugs act partly through central opioid pathways
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• no narcotic risk, red tape, records	• narcotic precautions required
• matchless economy in a modern NSAID	



References:

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And Rufen® Measures Up Best

RUFEN® (ibuprofen) Tablets

INDICATIONS AND USAGE: Treatment of signs and symptoms of rheumatoid arthritis and osteoarthritis during acute flares and in the long-term management of these diseases. Safety and effectiveness have not been established for Functional Class IV rheumatoid arthritis.

Relief of mild to moderate pain. Treatment of primary dysmenorrhea.

CONTRAINDICATIONS: Patients hypersensitive to ibuprofen, or with the syndrome of nasal polyps, angio-edema and bronchospastic reactivity to aspirin or other nonsteroidal anti-inflammatory drugs (see WARNINGS).

WARNINGS: Anaphylactoid reactions have occurred in patients hypersensitive to aspirin (see CONTRAINDICATIONS). Peptic ulceration and gastrointestinal bleeding, sometimes severe, have been reported. Peptic ulceration, perforation, or gastrointestinal bleeding can end fatally, however, an association has not been established. Rufen should be given under close supervision to patients with a history of upper gastrointestinal tract disease, and only after consulting the ADVERSE REACTIONS.

In patients with active peptic ulcer and active rheumatoid arthritis, nonulcerogenic drugs, such as gold, should be attempted. If Rufen must be given, the patient should be under close supervision for signs of ulcer perforation or gastrointestinal bleeding

PRECAUTIONS: Blurred and/or diminished vision, scotomata, and/or changes in color vision have been reported. If developed, discontinue Rufen and administer an ophthalmologic examination.

Fluid retention and edema have been associated with Rufen; caution should be used in patients with a history of cardiac decompensation.

Rufen can inhibit platelet aggregation and prolong bleeding time. Use with caution in patients with intrinsic coagulation defects and those taking anticoagulants.

Patients should report signs or symptoms of gastrointestinal ulceration or bleeding, blurred vision or other eye symptoms, skin rash, weight gain or edema.

To avoid exacerbation of disease or adrenal insufficiency, patients on prolonged corticosteroid therapy, this therapy should be tapered slowly when adding Rufen.

DRUG INTERACTION: *Coumarin-type anticoagulants.* The physician should be cautious when administering Rufen to patients on anticoagulants.

Aspirin. Concomitant use may decrease Rufen blood levels.

PREGNANCY AND NURSING MOTHERS: Rufen should not be taken during pregnancy nor by nursing mothers.

ADVERSE REACTIONS: Incidence greater than 1%. Gastrointestinal: The most frequent adverse reaction is gastrointestinal (4 to 16%). Includes nausea*, epigastric pain*, heartburn*, diarrhea, abdominal distress, nausea and vomiting, indigestion, constipation, abdominal cramps or pain, fullness of GI tract (bloating and flatulence). Central Nervous System: dizziness*, headache, nervousness. Dermatologic: rash* (including maculopapular type), pruritus. Special Senses: tinnitus. Metabolic: decreased appetite, edema, fluid retention. Fluid retention generally responds promptly to drug discontinuation (see PRECAUTIONS). *Incidence 3% to 9%.

Incidence less than 1 in 100. Gastrointestinal: gastric or duodenal ulcer with bleeding and/or perforation, hemorrhage, melena. Central Nervous System: depression, insomnia, confusion, emotional lability, somnolence, aseptic meningitis with fever and coma. Dermatologic: vesiculobullous eruptions, urticaria, erythema multiforme, Stevens-Johnson syndrome and alopecia. *Special Senses:* hearing loss, amblyopia (blurred and/or diminished vision, scotomata and/or changes in color vision) [see PRECAUTIONS]. Hematologic: neutropenia, agranulocytosis, aplastic anemia, hemolytic anemia (sometimes Coombs' positive), thrombocytopenia with or without purpura eosinophilia, decreases in hemoglobin and hematocrit. Cardiovascular: congestive heart failure in patients with marginal cardiac function, elevated blood pressure. Allergic: syndrome of abdominal pain, fever, chills, nausea and vomiting, anaphylaxis, bronchospasms (see CONTRAINDICATIONS). Renal: acute renal failure in patients with preexisting significantly impaired renal function, decreased creatinine clearance, polyuria, azotemia, cystitis, hematuria. Miscellaneous: dry eyes and mouth, gingival ulcers, rhinitis.

Causal relationship unknown. Gastrointestinal: pancreatitis. Central Nervous System: paresthesias, hallucinations, dream abnormalities, pseudotumor cerebri. Dermatologic: toxic epidermal necrolysis, photoallergic skin reactions. Special Senses: conjunctivitis, diplopia, optic neuritis. Hematologic: bleeding episodes. Allergic: serum sickness, lupus erythematosus syndrome, Henoch-Schonlein vasculitis. Endocrine: gynecomastia, hypoglycemia. Cardiovascular: arrhythmias (sinus tachycardia, bradycardia, and palpitations). Renal: renal papillary necrosis.

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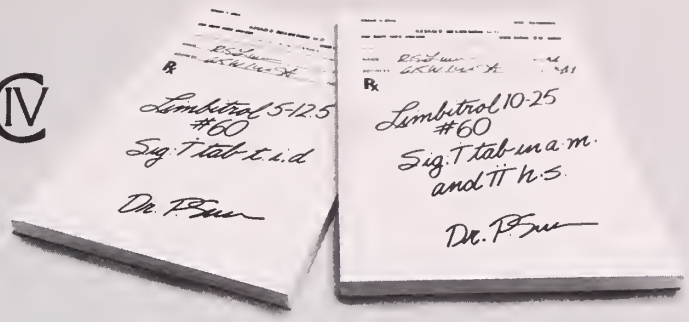
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References: 1. Cloghorn J: *Psychosomatics* 11:438-441, Sept-Oct 1970. **2.** Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jorvik ME. New York, Appleton-Century-Crofts, 1977, p 316 **3.** Boldessarini RJ, Torsy D: Tordive dyskinesia, in *Psychophormocology A Generation of Progress,* edited by Lipton MA, DiMoscio A, Killom KF. New York, Roven Press, 1978, p. 999.

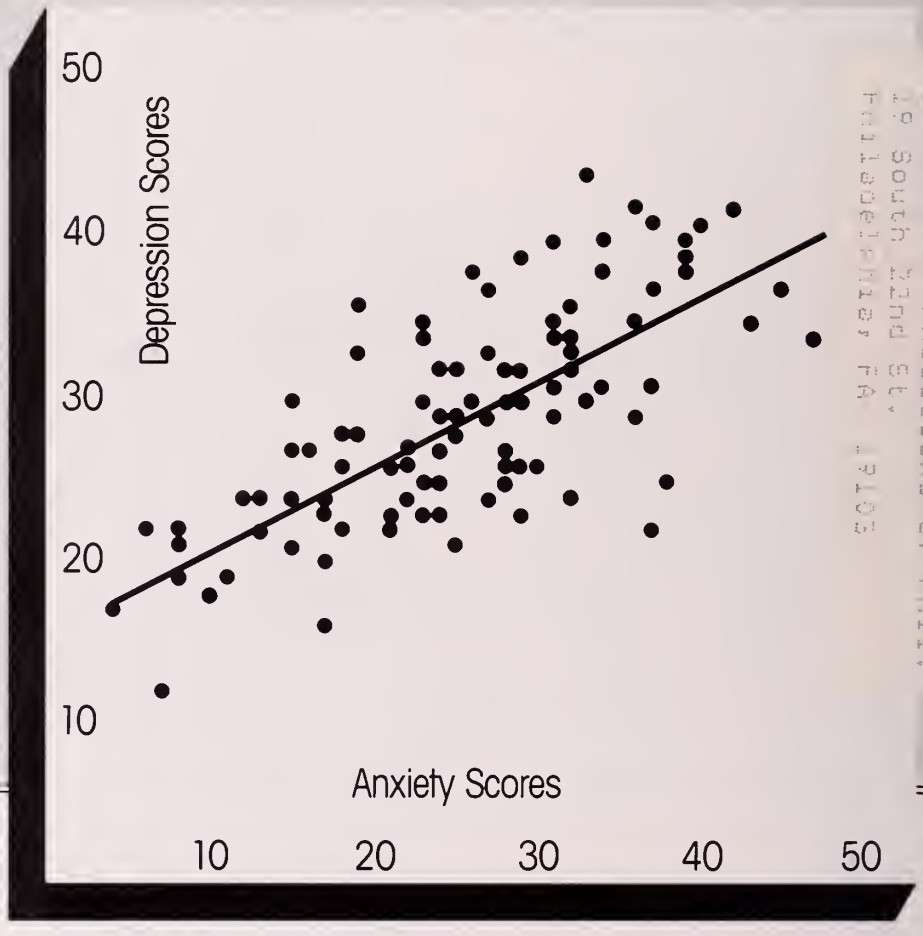
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Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia
Gastrointestinal: Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.
Endocrine: Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female and elevation and lowering of blood sugar levels.
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The graph illustrates the close correlation between depression and anxiety derived through the MMPI and the Taylor Manifest Anxiety Scale in 100 nonpsychotic psychiatric patients. The Coefficient of Correlation is 0.7. As depression increased, so did the anxiety levels.
—Adapted from Claghorn J[1]

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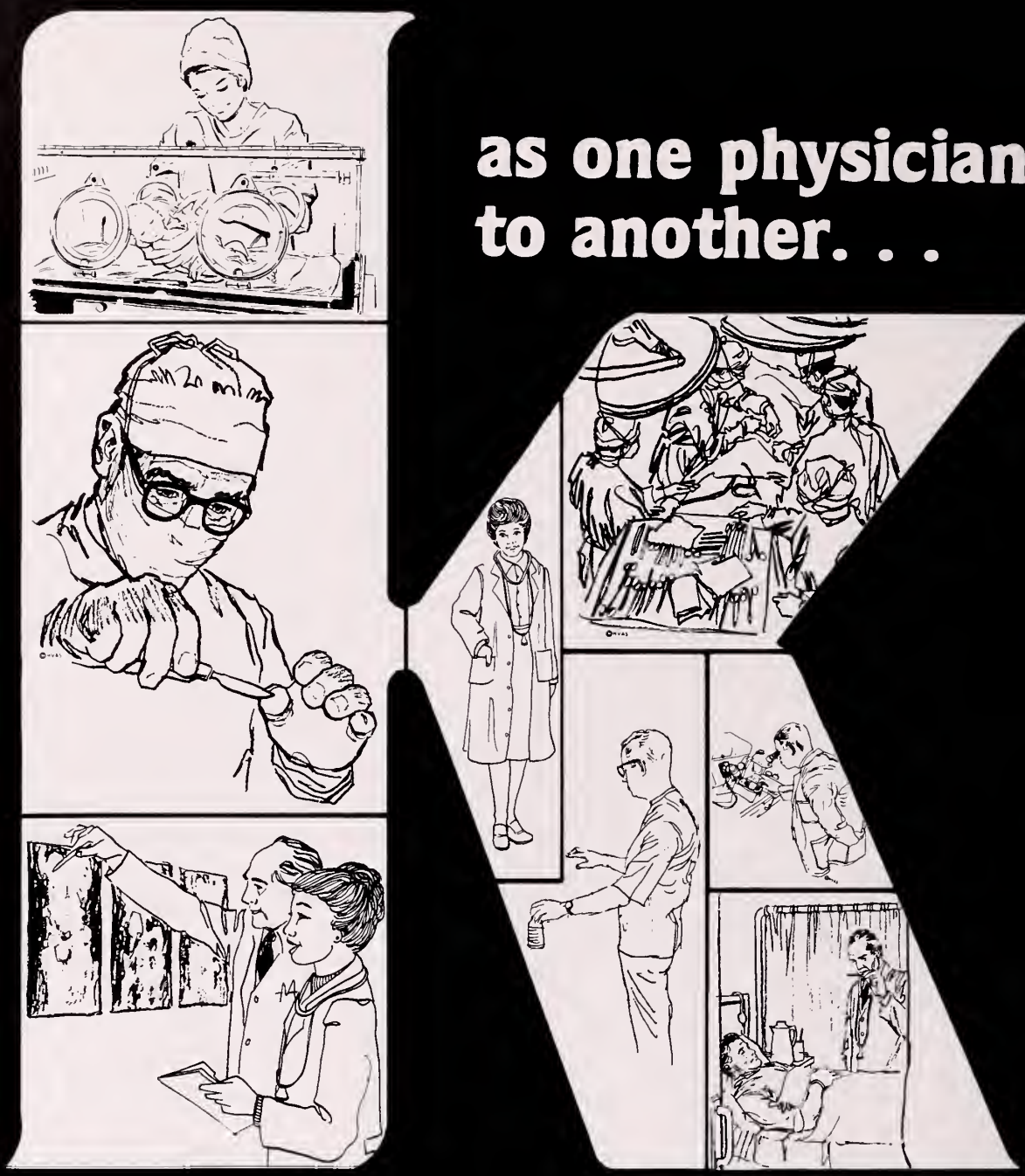
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PRESIDENT'S PAGE



WE find ourselves once again in the middle of the Christmas season and I would like to take this opportunity to wish all of you, your office staffs and your families a very merry Christmas and the happiest of new years. I feel that I have fully recovered from what proved to be a relatively mild coronary and I want to express my heartfelt thanks to all of you for your thoughts, cards and prayers during my illness. It certainly is a great help to the psyche to know that friends are pulling for you when the going gets a little rough.

Patient awareness continues to be a theme I would like to pursue as part of my general program during this coming year. Bob Klinglesmith and Bill Doll are working on some possible ways to bring into focus the general concept of patient awareness. Several suggestions have already been posted and consist of such things as a seminar for members, posters for M.D. offices or inserts with statements and a newsletter showing patients that you provide quality care. Along with the aforementioned ideas are things such as joint projects with the Kentucky Hospital Association or with Blue Cross and Blue Shield to get across to patients that we do care and that we are trying to keep down health care costs. Our biggest stumbling block continues to be bureaucratic bungling and our inability to get proper representation at the planning levels of third party payors.

Each physician must either continue to or begin to take some time from an already overloaded day to get across to our patients that the cost of health care is not solely a result of physicians' fees. We must realize that we certainly are the backbone of the health care program but we must object strenuously to being made the "whipping boys" of health care costs. I believe that patients continue to have respect and admiration for their individual physicians but I also believe that we must begin to defend ourselves in order to maintain that respect and admiration.

May I call upon any of you who have thoughts or ideas about how to clarify our position with our patients to bring them forth for consideration and/or discussion.

Please feel free to share with me or any of the KMA staff or officers your own methods of helping your patients to understand the problems at hand. It will only be through mutual sharing that we will finally be able to put together a worthwhile program that may work for all of us. Let's shake ourselves out of the doldrums and work together to show our patients that being a Medical Doctor is still one of the time honored professions.

Again, may I say to all of you—thank you, Merry Christmas and an exceedingly happy new year.

Dwight L. Blackburn, M.D.
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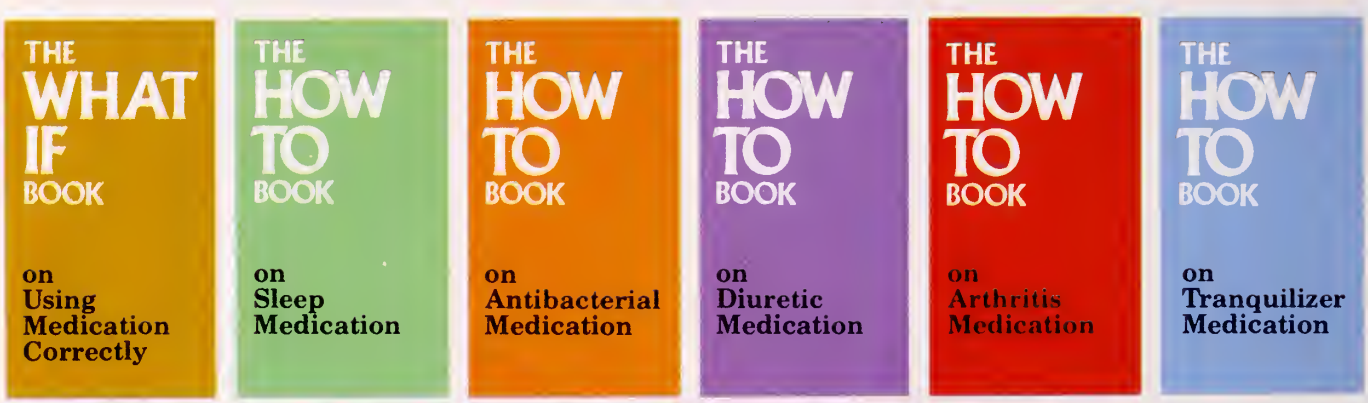
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SCIENTIFIC

Pancreatic Carcinoma—Early Diagnosis

A.B. REDDY, M.D. and RICHARD A. WRIGHT, M.D.

Pancreatic carcinoma is surgically curable only if detected early, chemotherapy and radiotherapy offering no survival benefit. Many new diagnostic modalities have recently been introduced to enhance screening capabilities. The application of new techniques with advantages and shortcomings is discussed.

THE incidence of pancreatic carcinoma has been increasing in recent years.[1] Pancreatic carcinoma now has the fourth highest mortality rate among malignancies.[1,2] One of the reasons for high mortality rates is the difficulty in diagnosing pancreatic carcinoma before it has metastasized.[1,2] The pancreas is in an inaccessible location for direct visualization by standard non-radiographic endoscopic techniques. The retroperitoneal location of the pancreas allows for physical findings only in advanced disease cases.

Clinical Presentation

The patient commonly presents with vague epigastric pain, often radiating to the back, with weight loss and malaise. Jaundice may be present if the carcinoma involves the body of the pancreas, thus obstructing the common bile duct. Icteris also can be caused by extensive hepatic metastases, although this presentation is somewhat uncommon. An epigastric mass may be palpated in advanced cases, although this is the exception rather than the rule in current medical practice. Concomitant pancreatitis with pseudocyst formation, pleural effusion, ascites, encephalopathy, and subcutaneous edema may be present, particularly if the patient is a chronic alcohol abuser and has a history of previous pancreatitis. Serum amylase is elevated in only 50% of cases on presentation, thus being an unreliable screening modality. Ectopic hormone production may result in endocrine abnormalities such as hyperthyroidism, Cushing's Disease, or hypercalcemia, but these presentations are much less frequent than is found in carcinoma of the lung or liver.

From the Division of Digestive Diseases and Nutrition Department of Medicine, University of Louisville School of Medicine and Veterans Administration Medical Center, Louisville, KY

Epidemiology

Factors associated with pancreatic carcinoma include cigarette smoking, chronic alcoholism, diabetes mellitus, consumption of decaffeinated coffee, a history of uterine myomata or repetitive spontaneous abortions, occupation of dry cleaning, and exposure to gasoline.[2] In one study, the developing pancreatic cancer was directly proportional to the amount of coffee consumed.[3]

Diagnostic Modalities

Ultrasound is now widely regarded as the screening method of choice for the diagnosis in



Fig. 1: Abdominal ultrasound showing a solid mass in the head of the pancreas.



Fig. 2: Computed tomogram revealing mass in the tail of the pancreas with obliteration of peripancreatic fat planes and displacement of adjacent organs, and hepatic metastases.

pancreatic cancer. It is inexpensive and noninvasive. It can display pancreatic size, contour, and parenchymal consistency. The disadvantages of ultrasound are its inability to delineate the pancreas in obese patients, and in those with excess bowel gas. The ultrasonographers' expertise is essential for successful pancreatic scanning. Ultrasound has a sensitivity and specificity of greater than 90% in detecting pancreatic cancer.[4] A normal ultrasound rules out pancreatic carcinoma with a high degree of confidence. It is likely that improved technology will lead to even more accurate imaging of the pancreas in the future. The most common ultrasonic finding in pancreatic carcinoma is a solid mass in the head of the pancreas. (Figure 1)

Computed tomography (CT) is also a useful tool in the diagnosis of pancreatic carcinoma. The direct signs of pancreatic carcinoma include visualization of a mass within the pancreas, alteration of normal contour, and obliteration of peripancreatic fat.[5] (Figure 2) These signs are not specific for pancreatic cancer and the CT scan can not differentiate inflammatory from neoplastic masses with a high degree of accuracy.[5] In the current state of technology, computed tomography has the same sensitivity and specificity as ultrasound, and may in fact be more accurate in the patient with excessive bowel gas or obesity. Its increased cost and lack of universal availability limit its use in relation to ultrasonic screening.

Endoscopic retrograde cholangio-pancreatography (ERCP) utilizing the side viewing duodenoscope, is a highly reliable and specific method for evaluating pancreatic disease, including pancreatic carcinoma. Since 95% of pancreatic malignancies are of ductal origin, ERCP is highly specific for pancreatic carcinoma.[7] Findings include obstruction (nodular, irregular, rat tail, or eccentric), encasement of pancreatic or common bile ducts, and displacement of normal anatomical land marks. (Figure 3) A "double duct sign" indicating obstruction or encasement of both pancreatic and common bile duct is virtually diagnostic of pancreatic carcinoma. Acinar defects or focal absence of secondary ductal filling, or an excavated tumor cavity in the absence of clinical evidence pancreatic abscess are both



Fig. 3: Endoscopic retrograde cholangiopancreatogram detailing normal common bile duct, normal proximal pancreatic duct, and abrupt ductal obstruction in the body of the pancreas secondary to pancreatic carcinoma.

strong indicators of pancreatic carcinoma.[4] The accuracy rate of ERCP in the diagnosis pancreatic cancer is approximately 95%.

Pancreatic angiography has a 40 to 90% sensitivity rate in detecting pancreatic carcinoma, but because of its invasive nature, should be limited to patients in whom ERCP is technically impossible, or in whom a normal pancreatogram is obtained in the presence of high clinical suspicion. Angiography is also useful in patients with pancreatograms suggesting carcinoma in evaluating the resectability of the tumor. Diagnostic features of the angiogram include displacement of anatomical land marks in the retroperitoneal area, tumor blush, and early venous filling.[7]

The need for earlier detection of pancreatic cancer is evident, since curative surgery is only possible in early cases. A blood test would be advantageous to screen the population at large. Carcinoembryonic antigen is routinely found in the sera of patients with carcinoma of pancreas and colon.[8] It is also elevated in many patients with alcoholic liver disease, uremia and bronchogenic carcinoma.[8] Pancreatic juice CEA activity from secretions collected during ERCP after stimulating with parenteral secretin is another useful adjunct in the diagnosis. A normal serum **and** pancreatic juice CEA effectively exclude pancreatic cancer and is negative in normal population.[10] The specificity and sensitivity of this assay has not yet been confirmed in multicenter trials. In a prospective analysis of 136 unselected patients admitted with intra-abdominal pathology, pancreatic oncofetal antigen analysis had a sensitivity of 91% and positive predictive value of 60%.[11,12,13] The **negative** predictive value was 94% in the diagnosis of pancreatic carcinoma.[14] Thus, a positive pancreatic oncofetal antigen test should be followed by more definitive tests such as ultrasound and/or ERCP.

Cytological examination of pancreatic juice derived from duodenal aspiration during ERCP is a helpful adjunct to pancreatography in the diagnosis of pancreatic cancer, especially in carcinoma involving the pancreatic head. Pancreatic juice can be obtained with a catheter in the Ampulla de Vater after giving parenteral secretin to stimulate pancreatic exocrine activity.[12] In a study done in Japan, the cytology of pancreatic juice had an accuracy of 79% in the diagnosis of cancer without any false positive results.[12] However, this test is somewhat limited because of the need for experienced cytopathologists and the ability to obtain pancreatic secretion without contamination of contrast material.

Percutaneous fine needle aspiration biopsy of malignant lesions in the pancreas is a safe and reliable method of confirming the histological diagnosis of pancreatic carcinoma.[13] The biopsy is performed after radiologically localizing the tumor.[13] The principal means of radiological localization are ERCP and angiography, although ultrasound and CT scanning may be used as well.[13] Of 91 percutaneous fine needle biopsies reported in the literature, the accuracy was 81% with only one patient developing complication (acute pancreatitis) as a result. Although there is a theoretical risk of seeding the needle tract with tumor cells, there is no reported case of tumor spread that is directly linked by fine needle aspiration biopsy. Experienced cytopathologists are necessary for the accurate interpretation of the needle aspiration specimen.

Summary

Although all of these diagnostic methods are useful in the early diagnosis of pancreatic carcinoma, clinical suspicion remains of upmost importance. When these tests are systematically performed in an appropriate clinical setting, an early diagnosis and treatment may be possible, thus increasing the number of surgically curable patients.

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Nutritional Assessment in Gastrointestinal Malignancy

N.S. MANN, M.D., J.M. KHAN, M.D., A.B. REDDY, M.D.
and R.G. OVERSTREET, M.D.

One hundred forty-six patients with gastrointestinal malignancy over a period of five years (1976-1980) were evaluated. Their nutritional status, as judged by admission serum albumin and initial total lymphocyte count, was determined. The effect of these two nutritional parameters on complications and mortality was evaluated. These variables were cross correlated and statistically analyzed by the Chi-square test. Lymphopenia (lymphocyte count $<$ 1500 cu mm) and hypoalbuminemia (albumin $<$ 3.5 gm/dl) was associated with markedly increased complication and mortality rate. This simple and easily available method of nutritional assessment will prove useful and popular.

THE occurrence of malnutrition in a significant number of hospitalized patients has been documented.[1-6] From these studies it would seem that nutrition support is neglected in the hospitalized patients. A prospective study has documented that malnutrition becomes worse during the course of hospitalization.[6] Malnutrition is associated with an increased morbidity and mortality in both medical and surgical patients.[7] A positive correlation between nutrition and immune competence has been established.[8] Hypoproteinemia is associated with increased post-operative infections.[9] Various methods to assess and record the nutritional status of patients have been described.[10-13] Instant nutritional assessment by serum albumin and total lymphocyte count which are routinely measured on admission has been found to be useful in predicting mortality and complication rate in hospitalized patients.[7] Because of its simplicity and easy availability, this method is likely to become popular. We have used these two parameters in evaluating the nutritional status of patients with gastrointestinal malignancy and their relationship to mortality and complication rate.

From Digestive Diseases and Nutrition Section, V.A. Medical Center, University of Louisville School of Medicine, Louisville, KY. Request for reprints: 800 Zorn Avenue, Louisville, KY 40202 (N.S. Mann, M.D.). The authors wish to thank T. Ross, P. Hagan, D. Brewer, B. Gunter, and M. Crossley for their help with the study. Presented in part Annual Meeting American College of Nutrition, Bethesda, MD, September 16, 1981 and American College of Gastroenterology, Bal Harbour, Florida, October 28, 1981. Published as an abstract Am. J. Gastro 76:185, 1981.

Materials and Methods

All the cases of gastrointestinal malignancy over a period of five years (1976-1980) in our institution were evaluated. There were 156 patients. Ten cases were excluded because of lack of information on the charts. This report is based on the study of 146 patients. Admission lymphocyte count, admission serum albumin, complications eg impaired wound healing, infections of various kinds, bacteremia and mortality were noted. These variables were cross correlated and evaluated statistically by the Chi-Square test using Yates Adjustment.

Results

The mean age of the patients included in this study was 63.5 years (range 36-89 years). The number of patients with various types of malignancy is noted in Table I. The whole group was evaluated to determine the relationship between serum albumin and/or total lymphocyte count and the incidence of complications and death. These data are summarized in Table II. The serum albumin was low (*ie* less than 3.5 g/dl) in 39.8% of the cases, and 57.6% had low (*ie* less than 1500/mm^3) total lymphocyte count. A combination of low albumin and low lymphocyte count was found in 29.4% of the patients. The low albumin was associated with a three-fold increase

in complication rate and a four-fold increase in death rate; these findings are statistically significant. Lymphopenia was associated with 1.7-fold increase in complications which is not statistically significant but a four-fold increase in deaths which is significant. When both serum albumin and total lymphocyte count were low there was a 2.6-fold increase in complications and a seven-fold increase in death rate; both these findings are statistically significant.

Discussion

In municipal hospitals hypoalbuminemia has been reported in 44% and lymphopenia in 34% of hospitalized patients.[1,2] These data are similar to those observed by us. In an affluent community hospital[7] the incidence of hypoalbuminemia was reported to be 7.6% and that of lymphopenia 30.2%. A normal serum albumin and normal lymphocyte count, in our study, was found only in 33.5% compared to 65.6% seen in a community hospital.[7] In our study, hypoalbuminemia and lymphopenia occurred together in 29.4% of the patients compared to only 3.4% in an affluent community hospital.[7] In the study population the incidence of hypoalbuminemia and lymphopenia is more marked because all of these patients have documented gastrointestinal malignancy. Metastatic liver disease and bone marrow involvement with carcinoma might have contributed to hypoalbuminemia and lymphopenia in these patients.

A significant correlation between arm-muscle circumference and serum albumin has been reported.[2] The arm-muscle circumference reflects the state of muscle protein[14] and circulating proteins such as albumin reflect the visceral protein status.[15] The total lymphocyte count correlates with immunocompetence.

TABLE I. GASTROINTESTINAL CARCINOMA

ORGAN	NUMBER
Esophagus	34
Stomach	25
Pancreas	22
Colon	65
Total	146

The increase in complications and mortality was related to low serum albumin. A low lymphocyte count connotes a significant increase in deaths. The combination of hypoalbuminemia and lymphopenia provided a warning of significantly increased complication and death rate. Hypoalbuminemia seems to carry more weight in this regard than lymphopenia.

Nutritional assessment carried out by noting admission serum albumin and admission total lymphocyte count seems to provide an early warning system in cases of gastrointestinal malignancy to identify those cases which are at higher risk for developing complications. An excellent prospective study[6] has established that most parameters of nutrition worsen during hospitalization. Early nutritional replenishment in patients with gastrointestinal malignancy may reduce complications and death rate after surgery and/or chemotherapy with toxic drugs.

TABLE II. CORRELATION OF SERUM ALBUMIN AND LYMPHOCYTE COUNT WITH COMPLICATIONS AND DEATHS

SERUM ALBUMIN GM/DL	PATIENTS (%)	COMPLICATIONS (%)	DEATHS (%)
>3.5	88 (60.2)	14 (15.9)	10 (11.3)
<3.5	58 (39.8)	26 (44.8)	28 (48.2)
Total	146	40 (27.3)	38 (24.6)
p Value		0.025	0.025

LYMPHOCYTE COUNT MM³	PATIENTS (%)	COMPLICATIONS (%)	DEATHS (%)
>1500	62 (42.4)	12 (19.3)	6 (09.6)
<1500	84 (57.6)	28 (33.3)	32 (38.0)
Total	146	40	38
p Value		NS	0.025

SERUM ALBUMIN GM/DL	LYMPHOCYTE COUNT MM³	PATIENTS (%)	COMPLICATIONS (%)	DEATHS (%)
>3.5	>1500	49 (33.5)	7 (14.2)	4 (08.1)
>3.5	<1500	40 (27.3)	11 (27.5)	6 (15.0)
<3.5	>1500	14 (9.5)	6 (42.8)	3 (21.4)
<3.5	<1500	43 (29.4)	16 (37.2)	25 (58.1)
Total		146	40	38
p Value			0.05	0.003

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Radiation Therapy in Colorectal Carcinoma

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Colorectal carcinoma is a major problem in the United States with approximately 55,000 deaths and 120,000 new cases this year. Radiotherapy is used in the management of colorectal carcinoma in three different circumstances: 1) Medically inoperable patients or those who refuse surgery, 2) Pre- and/or postoperative adjuvant therapy, and 3) Palliative therapy. Recent studies indicate that preoperative radiotherapy can convert unresectable lesions into resectable cases and that postoperative radiotherapy is indicated in those patients at high risk for local recurrence.

CARCINOMA of the colon and rectum is the second leading cause of mortality in American males and females when all age groups are combined. Estimates predict that there will be 55,000 deaths and 120,000 new cases of carcinoma of the colon and rectum in 1981, with approximately 1.5% of these new cases and deaths occurring in Kentucky.[1]

The overall five-year survival for carcinoma of the colon and rectum is approximately 35%.[2] Although survival rates vary from series to series, these rates have been relatively constant over the past three to four decades.[3] Resection alone has reached a plateau in treating this disorder. Turnbull's "no-touch isolation technique"[4] has been the most recent surgical development in improving survival. At present, earlier detection and adjuvant therapy are all that is available to increase survival. The results to date with chemotherapy have not been encouraging, but radiotherapy has found itself a useful adjuvant to surgical care.

Radiation therapy has clinical application in the management of colorectal carcinoma in: 1) Medically inoperable patients or those who refuse surgery, 2) Pre- and/or postoperative adjuvant therapy, and 3) Palliative therapy.

Histologically, 95% of all colorectal cancers are adenocarcinomas with the remaining 5% being squamous cell carcinoma, adenoacanthoma, sarcoma, lymphoma, carcinoid and very rarely melanocarcinoma.[5]

From the University of Kentucky College of Medicine

The distribution of anatomic location of adenocarcinoma of the colorectum is approximately: 1) Rectum, 35%, 2) Sigmoid, 25%, 3) Descending colon, 5 to 10%, 4) Transverse colon, 5 to 10%, and 5) Right colon, 10 to 15%.[5] Therefore, at presentation, approximately 10% of these lesions are within reach of the examining finger and another 60% are accessible to the rigid sigmoidoscope.[6]

With regard to the Modified Dukes Classification[7] (Table I), it has been demonstrated that the prognosis of patients with carcinoma of the colon is well correlated with stage.

At the time of presentation, approximately 30% of patients have sufficiently advanced disease to prevent resection for cure and another 7% of patients present with massive local disease that is unresectable due to the size and local invasion of the primary lesion.[8] Roughly 40% of patients will, therefore, have either unresectable disease or disease with viable neoplastic cells beyond the surgical field resulting in incomplete excision of the tumor. The problem is of particular importance in rectal tumors where wide in-block resection is limited by the confines of the narrow bony pelvis, and the close proximity of the genitourinary structures anteriorly. The lack of a substantial mesentery and peritoneal covering enhance the possibility of tumor seeding and spillage at the time of resection.[9]

The overall rate of local recurrence in patients initially treated by excision for cure is approximately 15%, another 15% develop liver metastases, 15% develop distant metastases and 3 to 4% will have a second primary. Only 50% of those patients resected for cure remain disease

TABLE I

Pathologic Staging System for Carcinoma of the Colon*

Stage	Degree of Invasion
A	Limited to mucosa or submucosa
B_1	Extension into but not through muscularis
B_2	Extension to or through serosa; Negative nodes
C_1	Limited to serosa; Positive nodes
C_2	Extension through serosa; Positive nodes
D	Distant metastases

*Modified from Astler, et al.[7]

free at five years and are responsible for the overall five year survival of 30-35%. (Table II)

It follows that the rationale for adjuvant radiation therapy is: 1) Tumor shrinkage by radiotherapy followed by surgical excision, 2) Destruction of neoplastic cells at the periphery of the primary lesion and regional lymph nodes in order to reduce tumor seeding and spillage at the time of surgery, and 3) Destruction of residual neoplastic cells following resection.

The first published report of the treatment of cancer of the rectum with radiation therapy occurred just 16 years after the discovery of radium in 1898.[10] Fourteen years later, radiation therapy was used preoperatively to reduce tumor size and convert huge lesions to those which would lend themselves to surgical resection.[11] Additional series were published sporadically until Stearns, *et al*[12] published a non-randomized study of a series of 727 patients treated with preoperative radiation therapy compared to 549 patients treated by surgical excision alone. This series reported a 10% increase in five-year survival for the group which received preoperative radiation therapy compared to the resection alone group, 55% vs. 45% respectively. The large number of cases in this series yielded statistical significance and prompted an increased interest in the use of adjuvant radiation therapy.

A prospective randomized trial, conducted by the Veteran's Administration Surgical Adjuvant Group[13] reported no significant difference in the overall five-year survival between two groups of 700 patients with biopsy proven rectosigmoid adenocarcinoma randomized by surgery alone and those patients who received 2000rad preoperative radiation therapy. However, in the patients undergoing abdominoperineal resection for cure, the adjuvant radiation therapy group had a statistically significant better five-year survival, 46.9% compared to 34.3%. Further, the interval survival rates of those surviving at five years were progressively wider with each year post-treatment and was 83% for the preoperative radiation therapy versus 62% for the resection alone group (A-P resection). This may suggest delayed benefit due to decreased viability of neoplastic cells remaining after the operation. This includes cells disseminated at surgery or those remaining at the operative site.

Stevens, *et al*[14] reported a series of 97 patients who received high-dose preoperative radiation therapy. The five-year survival was 53% in 40 patients who had curative resection. Of these 40 patients, none had pelvic recurrence. Pilepich, *et al*[15] performed preoperative radiotherapy on 44 patients who at presentation were considered to have unresectable lesions. Of these patients, 38 underwent exploration and complete resection was obtained in 27 patients. Short-term follow-up (mean 27 months) revealed 22 of these 27 patients were free of disease.

Postoperative radiation therapy has several theoretical advantages in that it allows for a more accurate staging of the disease prior to therapy. Several trials comparing operation alone to operation plus postoperative adjuvant radiation therapy for those patients with a high risk for local recurrence (Stages B_2 and C_2), suggest the benefit of postoperative radiation. Gunderson[16] has reported that in 31 patients receiving postoperative radiotherapy for B_2 and C_2 lesions, there was only one patient who had local failure. Other investigators have also noted an increase in local control with Stage B_2 and C_2 lesions.[17] Mendiondo, *et al*[18] reported a 48% incidence of local control in 27 patients with advanced lesions and incomplete resections. Withers, *et al*[19] noted a 96% local control rate in 45 patients. Turner, *et al*[20] have recently reported the early results of 95 patients with B_2 or C_2 lesions who had curative resection followed by radiation therapy. At two years, 66 (69.5%) of these patients were free of disease. Based on these and similar studies, Moss, *et al*[21] have recommended postoperative radiotherapy for all patients with Stage B_2 and C_2 adenocarcinoma of the rectosigmoid region.

TABLE II
Distribution and Outcome of 100 Theoretical Patients with Colorectal Adenocarcinoma* Presentation (100)

Operable, but not resectable for cure 30% (30)		Resection for cure 63% (63)	Inoperable, Massive local Disease 7% (7)	
		At 5 years		
Local Recurrence 15% (10)	Liver Mets 15% (10)	Distant Mets 15% (10)	Second Primary 3-4% (2)	No evidence of Disease 50% (31)

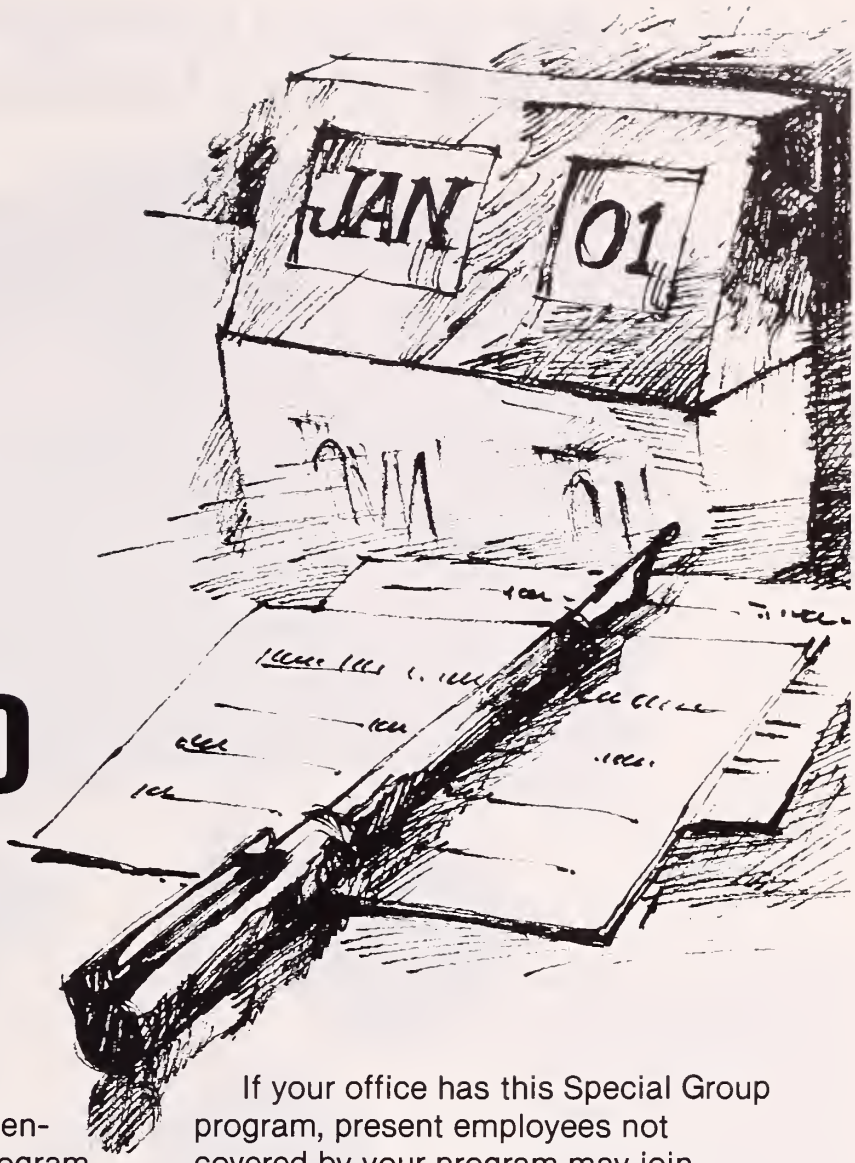
*Data from Horsley.[8]

Fortunately, the disadvantages of adjuvant radiation therapy are few and are generally easily avoided with proper attention to timing and dosing. Preoperative radiation may not allow for precise pretreatment staging. This may result in unnecessary radiation to early stage lesions. The reduction in staging accuracy may be a small price to pay if survival is increased, however. The delay in resection improved by preoperative radiation may or may not have clinical significance. The adverse effect on wound healing, and general systemic reaction to radiation can be minimized by appropriate dosage control and delivery by a skilled radiotherapist.

Obviously, further clinical trials are necessary. The early results of appropriately planned and delivered preoperative radiation are encouraging. Specifically, the results of therapy for lesions of the rectum and lower sigmoid appear to be better for those patients who receive radiation. This may in some way negate the anatomical limitations imposed by working in the pelvis. Postoperatively, it appears that adjunctive radiation improves survival in Stage B_2 and C_2 lesions. Improving resectability is an obvious advantage.

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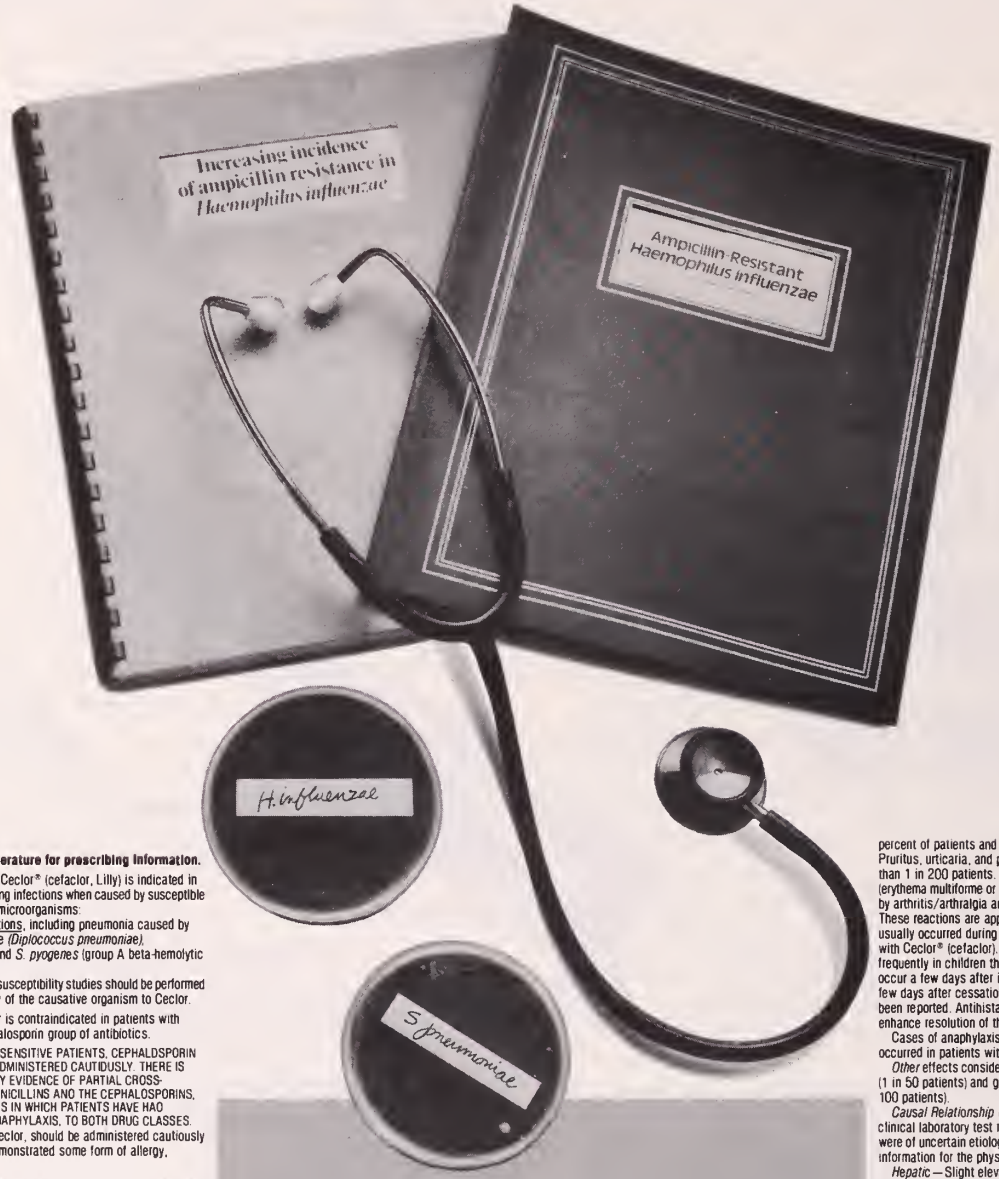
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Brief Summary.
Consult the package literature for prescribing information.

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Lower respiratory infections, including pneumonia caused by *Streptococcus pneumoniae (Diplococcus pneumoniae), Haemophilus influenzae,* and *S. pyogenes* (group A beta-hemolytic streptococci).

Appropriate culture and susceptibility studies should be performed to determine susceptibility of the causative organism to Ceclor.

Contraindication: Ceclor is contraindicated in patients with known allergy to the cephalosporin group of antibiotics.

Warnings: IN PENICILLIN-SENSITIVE PATIENTS, CEPHALOSPORIN ANTIBIOTICS SHOULD BE ADMINISTERED CAUTIOUSLY. THERE IS CLINICAL AND LABORATORY EVIDENCE OF PARTIAL CROSS-ALLERGENICITY OF THE PENICILLINS AND THE CEPHALOSPORINS, AND THERE ARE INSTANCES IN WHICH PATIENTS HAVE HAD REACTIONS, INCLUDING ANAPHYLAXIS, TO BOTH DRUG CLASSES.

Antibiotics, including Ceclor, should be administered cautiously to any patient who has demonstrated some form of allergy, particularly to drugs

Precautions: If an allergic reaction to cefaclor occurs, the drug should be discontinued, and, if necessary, the patient should be treated with appropriate agents, e.g., pressor amines, antihistamines, or corticosteroids

Prolonged use of cefaclor may result in the overgrowth of nonsusceptible organisms. Careful observation of the patient is essential. If superinfection occurs during therapy, appropriate measures should be taken.

Positive direct Coombs tests have been reported during treatment with the cephalosporin antibiotics. In hematologic studies or in transfusion cross-matching procedures when antiglobulin tests are performed on the minor side or in Coomb testing of newborns whose mothers have received cephalosporin antibiotics before parturition, it should be recognized that a positive Coombs test may be due to the drug.

Ceclor should be administered with caution in the presence of markedly impaired renal function. Under such a condition, careful clinical observation and laboratory studies should be made because safe dosage may be lower than that usually recommended

As a result of administration of Ceclor, a false-positive reaction for glucose in the urine may occur. This has been observed with Benedict's and Fehling's solutions and also with Clinitest® tablets but not with Tes-Tape® (Glucose Enzymatic Test Strip, USP, Lilly).

Usage in Pregnancy—Although no teratogenic or antifertility effects were seen in reproduction studies in mice and rats receiving up to 12 times the maximum human dose or in ferrets given three times the maximum human dose, the safety of this drug for use in human pregnancy has not been established. The benefits of the drug in pregnant women should be weighed against a possible risk to the fetus.

Usage in Infancy—Safety of this product for use in infants less than one month of age has not been established.

Adverse Reactions: Adverse effects considered related to cefaclor therapy are uncommon and are listed below.

Gastrointestinal symptoms occur in about 2.5 percent of patients and include diarrhea (1 in 70) and nausea and vomiting (1 in 90).

As with other broad-spectrum antibiotics, colitis, including rare instances of pseudomembranous colitis, has been reported in conjunction with therapy with Ceclor.

Hypersensitivity reactions have been reported in about 1.5 percent of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions (erythema multiforme or the above skin manifestations accompanied by arthritis/arthralgia and, frequently, fever) have been reported. These reactions are apparently due to hypersensitivity and have usually occurred during or following a second course of therapy with Ceclor® (cefaclor). Such reactions have been reported more frequently in children than in adults. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.

Other effects considered related to therapy included eosinophilia (1 in 50 patients) and genital pruritus or vaginitis (less than 1 in 100 patients).

Causal Relationship Uncertain—Transitory abnormalities in clinical laboratory test results have been reported. Although they were of uncertain etiology, they are listed below to serve as alerting information for the physician.

Hepatic—Slight elevations in SGOT, SGPT, or alkaline phosphatase values (1 in 40).

Hematopoietic—Transient fluctuations in leukocyte count, predominantly lymphocytosis occurring in infants and young children (1 in 40).

Renal—Slight elevations in BUN or serum creatinine (less than 1 in 500) or abnormal urinalysis (less than 1 in 200). [100281R]

Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285.

Eli Lilly Industries, Inc.
Carolina, Puerto Rico 00630

200086

EDITORIAL

Nurses and Doctors

THE profession of nursing is unsung and unappreciated by most physicians. We are quick to criticize and complain when orders are not carried out, and all too frequently the nurse is blamed for our own shortcomings.

The truth of our doctor-nurse relationship is that a good nurse can save a bad doctor and conversely a bad nurse can nullify the best efforts of a good doctor.

I blush to think how many times an intelligent, alert nurse has gently said, "Are you sure you want to order this, you know the patient is already getting . . ."

More dramatically, the call from the nurse that the patient does not look good and should be checked is in the majority of cases a justified call for help and needs medical response.

I want to thank all the nurses for their selfless dedicated care. They are underpaid. They suffer abuse from patients and families which they gracefully handle. And they are far more valuable in the determination of the ultimate outcome of the patient than most of us realize or care to admit.

Thank you, nurses. Be patient with us.

Paul C. Grider, Jr., M.D.

When your overweight patients seek your help with a weight reduction plan...

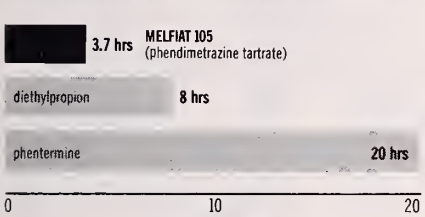


The benefits will outweigh the risks when you prescribe MELFIAT® 105

Because MELFIAT 105 effectively controls appetite.
MELFIAT 105 (phendimetrazine tartrate), an effective anorexiant, provides the appetite control overweight patients often need to begin a successful program of weight reduction. And the positive results of initial short-term therapy with MELFIAT 105 can help motivate them to a lifelong commitment of weight control.

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Therapeutic efficacy combined with a short half-life and minimal abuse potential make MELFIAT 105 the drug of choice in the treatment of exogenous obesity. Because MELFIAT 105 has a short half-life, it minimizes drug accumulation and helps to eliminate such effects as disturbed sleep patterns. And, because MELFIAT 105 has significantly lower abuse potential than the amphetamines[1], there's less risk to your patients. According to a NIDA (National Institute on Drug Abuse) report, phendimetrazine appears to be the least abused anorexiant when compared to phentermine and diethylpropion.[1]

Half-life comparison of MELFIAT 105 and other anorexiants[2]



Because MELFIAT 105 is in a sustained-release capsule.
MELFIAT 105 provides your patients with continuous drug delivery for appetite control that lasts throughout the day and helps to eliminate compulsive snacking and overeating at meals. In addition, the sustained-release capsule form maintains more constant blood levels of MELFIAT 105...without peaks and valleys.

Because MELFIAT 105 offers convenient, once-a-day dosage.
MELFIAT 105 is available in a convenient capsule containing 105 mg. The simple morning dosage regimen is designed to encourage compliance, minimizing the chance of missed doses and assuring optimum therapeutic results.

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Reid-Provident has the highest standards of quality to assure that only the finest products reach you. An advisory board of research scientists, physicians, pharmacists, and other technical staff continually review existing products and new product proposals to make sure that the latest pharmaceutical technology is used in their design and manufacture. That's because Reid-Provident is committed to you and your patients.

For more information please write to
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640 Tenth Street, N.W.
Atlanta, Georgia 30318

References: 1. Sheu YS, Ferguson JA, Cooper JR: *Evaluation of the Abuse Liability of Diethylpropion, Phendimetrazine, and Phentermine,* unclassified document ADAMHA, HHS. Office of Medical and Professional Affairs, NIDA, 1980.
2. Douglas JG, Munro JF: The role of drugs in the treatment of obesity, *Drugs* 21:362-373, 1981.

MELFIAT® 105 UNICELLES® Ⓒ III
(phendimetrazine tartrate) Sustained-Release Capsules 105 mg

MELFIAT® 105 UNICELLES® Ⓒ
(phendimetrazine tartrate) 105 mg Sustained-Release Capsules

INDICATIONS AND USAGE: Melfiat® 105 (phendimetrazine tartrate) is indicated in the management of exogenous obesity as a short-term adjunct (a few weeks) in a regimen of weight reduction based on caloric restriction. The limited usefulness of agents of this class (See CLINICAL PHARMACOLOGY) should be measured against possible risk factors inherent in their use such as those described below.

CONTRAINDICATIONS: Advanced arteriosclerosis, symptomatic cardiovascular disease, moderate to severe hypertension, hyperthyroidism, known hypersensitivity, or idiosyncrasy to the sympathomimetic amines, glaucoma. Agitated states. Patients with a history of drug abuse. During or within 14 days following the administration of monoamine oxidase inhibitors (hypertensive crises may result).

WARNINGS: Tolerance to the anorectic effect usually develops within a few weeks. When this occurs, the recommended dose should be discontinued. Phendimetrazine tartrate may impair the ability of the patient to engage in potentially hazardous activities such as operating machinery or driving a motor vehicle; the patient should therefore be cautioned accordingly.

Drug Dependence: Phendimetrazine tartrate is related chemically and pharmacologically to the amphetamines. Amphetamines and related stimulant drugs have been extensively abused, and the possibility of abuse of phendimetrazine tartrate should be kept in mind when evaluating the desirability of including a drug as part of a weight-reduction program. Abuse of amphetamines and related drugs may be associated with intense psychological dependence and severe social dysfunction. There are reports of patients who have increased the dosage to many times that recommended. Abrupt cessation following prolonged high-dosage administration results in extreme fatigue and mental depression; changes are also noted on the sleep EEG, manifestations of chronic intoxication with anorectic drugs include severe dermatoses, marked insomnia, irritability, hyperactivity, and personality changes. The most severe manifestation of chronic intoxication is psychosis, often clinically indistinguishable from schizophrenia.

USAGE IN PREGNANCY: The safety of phendimetrazine tartrate in pregnancy and lactation has not been established. Therefore, phendimetrazine tartrate should not be taken by women who are or may become pregnant.

USAGE IN CHILDREN: Phendimetrazine tartrate is not recommended for use in children under 12 years of age.

PRECAUTION: Caution is to be exercised in prescribing phendimetrazine tartrate for patients with even mild hypertension. Insulin requirements in diabetes mellitus may be altered in association with the use of phendimetrazine tartrate and the concomitant dietary regimen. Phendimetrazine tartrate may decrease the hypotensive effect of guanethidine. The least amount feasible should be prescribed or dispensed at one time in order to minimize the possibility of overdosage.

ADVERSE REACTIONS: Cardiovascular: Palpitation, tachycardia, elevation of blood pressure.
Central Nervous System: Overstimulation, restlessness, dizziness, insomnia, euphoria, dysphoria, tremor, headache; rarely psychotic episodes at recommended doses.
Gastrointestinal: Dryness of the mouth, unpleasant taste, diarrhea, constipation, other gastrointestinal disturbances.
Allergic: Urticaria.
Endocrine: Impotence, changes in libido.

OVERDOSAGE: Manifestations of acute overdosage with phendimetrazine tartrate include restlessness, tremor, hyperreflexia, rapid respiration, confusion, assaultiveness, hallucinations, panic states.
Fatigue and depression usually follow the central stimulation. Cardiovascular effects include arrhythmias, hypertension or hypotension and circulatory collapse. Gastrointestinal symptoms include nausea, vomiting, diarrhea, and abdominal cramps. Fatal poisoning usually terminates in convulsions and coma. Management of acute phendimetrazine tartrate intoxication is largely symptomatic and includes lavage and sedation with a barbiturate. Experience with hemodialysis or peritoneal dialysis is inadequate to permit recommendation in this regard. Acidification of the urine increases phendimetrazine tartrate excretion. Intravenous phentolamine (Regitine) has been suggested for possible acute, severe hypertension, if this complicates phendimetrazine tartrate overdosage.

DOSAGE AND ADMINISTRATION: Since Melfiat® 105 (phendimetrazine tartrate) 105 mg is a sustained-release dosage form, limit to one sustained-release capsule in the morning. Melfiat® 105 (phendimetrazine tartrate) is not recommended for use in children under 12 years of age.

HOW SUPPLIED: Each orange and clear sustained-release capsule contains 105 mg phendimetrazine tartrate in bottles of 100.

CAUTION: Federal law prohibits dispensing without prescription.

Reid-Provident Laboratories, Inc.
Atlanta, Georgia 30318

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ESPECIALLY FOR
KENTUCKY PHYSICIANS

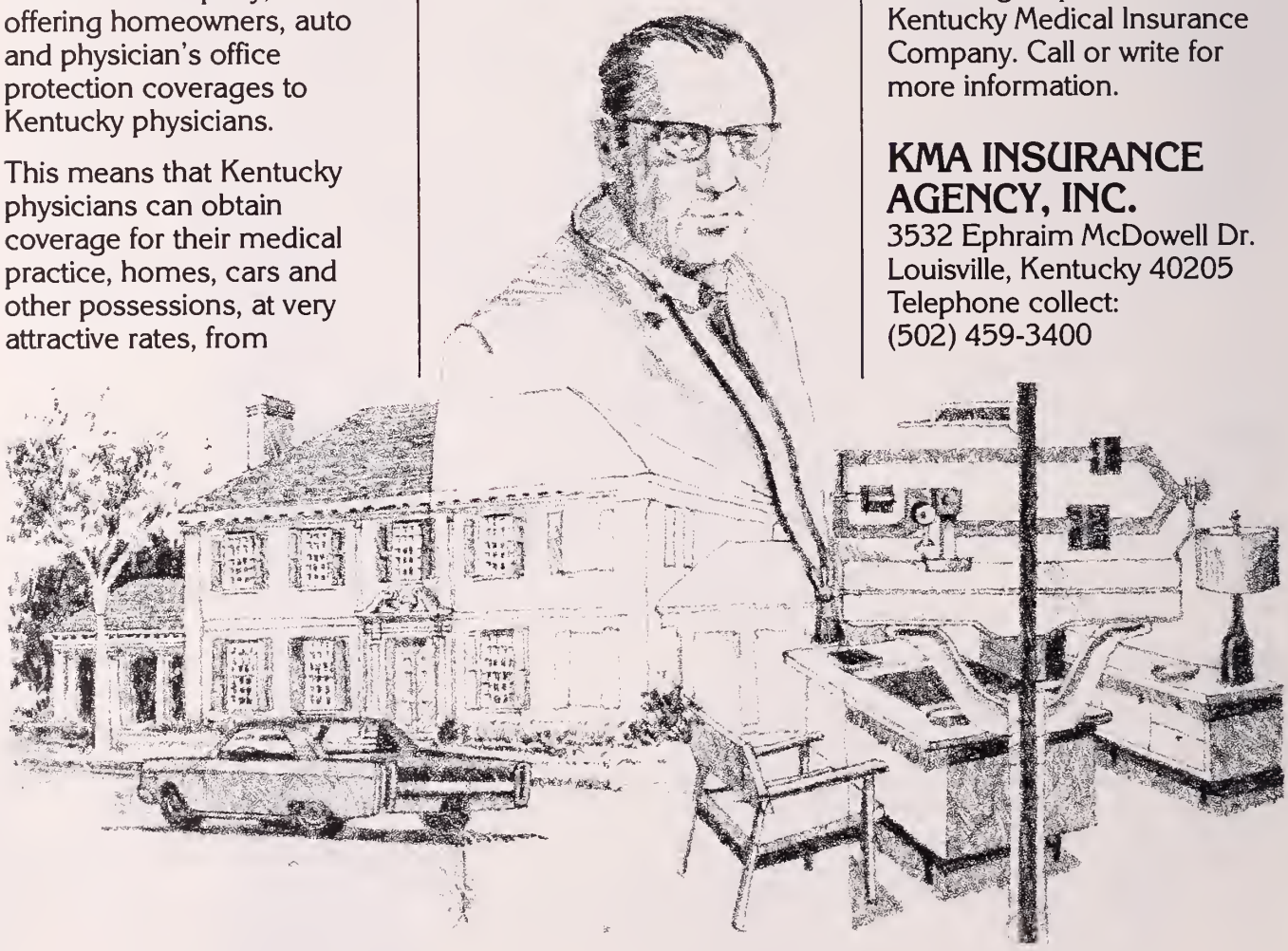
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George N. Burger, Covington

H. Davis Chipps, Lexington

Davis Hunter Coleman, Harrodsburg

Cooley L. Combs, Hazard

Jack R. Coyer, Paducah

T. Garrett Craft, Harlan

Nora D. Dean, Louisville

John E. Dunn, Paducah

George F. Dwyer, Jr., Louisville

Daniel E. Earley, Covington

Frederick Eberson, Lexington

W. Gerald Edds, Paducah

Oliver H. Fearing, Ashland

James D. Foley, Loyall

David Goldblatt, Out of State

William L. Harris, Russellville

John S. Harter, Louisville

John E. Haynes, Madisonville

Stuart Price Hemphill, Danville

Napoleon M. Imperial, Whitesburg

Robert Fulton Jasper, Somerset

Duncan Johnson, Owensboro

Nina Kateryniuk, Louisville

Roscoe I. Kerr, Louisville

Wiley E. Kozee, Ashland

T. G. Kraft, Harlan

Richard E. Mudd, Louisville

Karl M. Neudorfer, Ashland

William W. Nicholson, Louisville

T. Jefferson Overstreet, Lexington

Alma L. Roby, Louisville

Seymour Hopper Rowland, Ocala, FL

Howard L. Shanklin, Louisville

Laura E. Sheaffer, Louisville

Richard R. Snowden, Ravenna

Irvin H. Sonne, Louisville

George R. Tanner, Jr., Louisville

John T. Tcheng, Ft. Thomas

U. Ray Ulferts, Louisville

James M. Wygal, Louisville

List of names of deceased physicians available to The Journal as of October 15, 1982

Strange is it not?
that of the myriads who
Before us passed the door of Darkness through
Not one returns to tell of the Road
Which to discover we must travel too.

Omar Khayyam'
Rubáiyát



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This ad appears in State and County Medical Journals.

AUXILIARY



Ellen C. Sklar

The Auxiliary to the Kentucky Medical Association has changed in structure since the first Woman's Auxiliary was formally organized at Crab Orchard Springs in September of 1923. However, the principle objective of the Auxiliary has not changed. The organization's objectives are to aid charitable, educational and scientific purposes; to assist the Kentucky Medical Association in those programs that improve the health and quality of life for all; to promote health education and to encourage participation of volunteers in activities that meet health needs; to support health related charitable endeavors and to advise concerning the activities of the component auxiliaries.

The gender of the membership is no longer totally female and in addition a portion of the membership is engaged in the same or a different profession or has a full or part-time position. These changes along with economic, political and demand factors in health care have forced the auxiliary to change. Not to change with the times is to become stagnant and stagnation leads to the demise of an organization. Ann Landers has printed the "Seven Steps to Stagnation" and they are: we've never done it that way, we're not ready for that yet, we're doing all right without it, we've tried it once and it did not work, it costs too much, that's not our responsibility and finally, it will not work. Avoid these and the organization should move forward.

Transition and change do not come without problems within the organization. To ease these and to offer new programs, projects and recommendations, the Auxiliary to the American Medical Association has sponsored Leadership Confluences yearly. These are held in October at the Drake Hotel in Chicago. County President Elects (1 per 300 national members) from all over the United States as well as the President and President-Elect of each state are invited to this Confluence. The meeting offers workshops on membership, bylaws, dues collection, long-range planning, newsletters as well as seminars on Parliamentary Procedure, Cooperation with Medical Societies, Public Relations, Working with Other Organizations, Time Management and Legislation. In addition, there are also seminars on health programs. The Faculty at Confluence is always excellent—a favorite is Doctor Eva Schindler-Rainman, organizational and community consultant from California. The National Auxiliary strives to secure the very best to serve as faculty on the subjects listed. On a smaller scale, there are also workshops at the AMAA Convention in June. In the interest of cost containment, the Cluster meetings for State Presidents, State Presidents-Elect and State President-Elect Nominees were discontinued.

The AKMA has also offered a Leadership Conference in August for those who have a leadership role in the county auxiliaries. This year we were fortunate to have George Logan, Program Manager with the Kentucky Department of Education, present a program on "Bicycle Safety" while Doctor Herman S. Bush, Chairman of the Department of Health at Eastern Kentucky University spoke on, "Comprehensive School Health for Kentucky Schools." Workshops

were held on the subjects presented at National and were conducted by the State Chairmen. In April of 1983, we will add a series of seminars to the agenda for Convention. It is our feeling that if more members are aware of our objectives, the response will be greater. Auxiliaries must have a common goal—the goal will not only activate the members but bring them together as an auxiliary. New programs and projects will reach the counties through these conferences.

Volunteer Programs and Projects presented by the Auxiliary as well as those gleaned from other states through the interchange of ideas and opinions are most inspirational! These are needed in most communities due to the cuts in federal spending, but the auxiliary must have full support of physicians to implement these. Great strides have been made in some states and counties while others have not been successful. The Auxiliary devotes thousands of hours to volunteer work; no program is presented without the approval of the membership and we are aware of the needs of the community and of the individual. The approval and support of the physician is all that we need to make our programs and projects a success—we will do the rest! Our satisfaction comes if the program is done well, helps those in need and the field of medicine is enriched by it. Let us work side by side to make this a better world for those who need our help.

Ellen C. Sklar (Mrs. Allen)
President, AKMA

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(502) 459-9790

Dispensing Prescription Drugs

We are concerned that there may be some misunderstanding among those in the medical profession that prescription drugs dispensed by physicians are not subject to the child protection packaging standards of the Poison Prevention Packaging Act (PPPA).

The purpose of this letter is to correct any such impression by explaining the responsibility under the PPPA of physicians who dispense drugs. The Consumer Product Safety Commission's (CPSC) position regarding the applicability of the child protection packaging standards promulgated under the PPPA to dispensing physicians is summarized below for your convenience:

Prescription drugs dispensed by physicians are subject to the child protection packaging standards of the Poison Prevention Packaging Act in the same manner as prescription drugs dispensed by pharmacists. Therefore, a physician is responsible under the law for dispensing prescription drugs in child-resistant packaging.

The law does provide that non-child-resistant conventional packaging may be provided the consumer either at his request or at the direction of the prescribing physician. This does not, however, exempt drugs dispensed by physicians from the provisions of the law but rather allows the physician to consciously conclude within the spirit and intent of the noncomplying package exemption provision that a particular patient, *ie,* the elderly or handicapped would be unable to gain access to the drug if dispensed in child-resistant packaging. The legislative history of this provision of the PPPA is clear in expressing the intent of Congress that **noncomplying packaging is to be the exception rather than the rule.**

In summary, the present law and the legislative history relating to the promulgation of the prescription drug regulation make it clear that dispensing physicians are subject to the PPPA and its requirements. The child protection packaging standards for aspirin and other substances have reduced childhood ingestions by as much as 60% while prescription drug ingestions have been reduced by only approximately 22%. Part of the reason for the relatively small reduction in childhood ingestions of prescription drugs may be confusion over the physician's responsibilities when dispensing prescription drugs. In addition, dispensing physicians can play a vital role in increasing consumer acceptance and use of child-resistant packaging by demonstrating its proper use and encouraging the consumer in the importance of its use in reducing childhood ingestions and deaths.

It is therefore important that physicians who dispense their own drugs clearly understand their responsibilities under the law. This is why we are soliciting your help in contacting your membership with this message.

We will be pleased to discuss the matter further or answer any questions you or your members may have.

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Stephen Z. Smith, M.D.
Assistant Scientific Editor

BOOK REVIEWS

Current Obstetric & Gynecologic Diagnosis & Treatment-Fourth Edition

Edited by Ralph C. Benson, M.D. Lange Medical Publications, 1982

A nice review of Obstetrics and Gynecology has recently been published. Couched in the comfortable Lange series format, chief editor Ralph Benson has collated the collective thoughts, teachings and biases of some 46 contributors into a surprisingly uniformly styled and written book.

First the criticisms will be noted. Organization is debatable when in several instances chapters on obstetrics are separated from their sibling chapters by unrelated material. This creates unnecessary confusion and severs one's train of thought. Preferably the normal sequence of conception, tripartite stage—pregnancy, normal labor and delivery and the puerperium should be juxtaposed. Then infertility, high risk pregnancy, complicated labor and delivery and diseases of the puerperal period should be addressed.

Chapters on emotional and psychiatric aspects of female medicine practice are trite, unsophisticated and seduce the reader into assuming an interaction for which it is not prepared. Better that the authors should describe classical warning signs of psychiatric trouble and then encourage referral. Finally the cursory description of surgical procedure encourages the dilatante to do more than he is able or should. These parts should be taken as they are intended—merely an attempt to acquaint the non-obstetrician-gynecologist with surgical procedures available.

The goodness in this book is easy to find. Several chapters—fetus, newborn, diabetes and trophoblastic disease—are completely refinished. A number of others have been refined. There is a pleasant mixture of hand drawn and photographic illustrations relieving the endless typed pages. Graphs and tables are nicely placed, accurate and helpful. Therapeutic recommendations in the book abound, giving it a handbook quality.

This book will be comfortable in family practice, medical specialty, internal medicine and in psychiatric milieus.

Basic & Clinical Immunology—Fourth Edition

D. P. Stites, J. D. Stobo, H. H. Fudenberg and J. V. Wells
Lange Medical Publications, 1982

This newly published version is distinct from its predecessors. A tripartite division organizes the book into basic immunology, immunologic laboratory tests, and the most substantial—clinical immunology. In basic immunology are an unnecessary and lengthy historical vignette, complete with tattered photographs of immunology's forefathers. From their seeds emerged an ever fluorishing field firmly founded on basic research. The next chapters emphasize to ennui the nuts and bolts of immunology, from which current immunology is constructed. This is for the neophyte as well as those of us who by birth or by attrition have a deficiency in basic information. These pedantic chapters are well illustrated and accept with diplomacy the readers potential ignorance.

The second part is a potpourri of laboratory information which is useful to us only in a bystander fashion, as today's sophistication supercedes the unit lab from a reliable role. At least with reading here, we can face the report with an appreciation for its meaning.

Almost 50% of the body of the book sorts the immunology germane to various organ systems. Despite the attractiveness of this arrangement, the cursory coverage is too rapid to register and sufficiently gleaned to be of limited help to the medical person beyond his initial clerkship. That is, the paperback handiness does not permit the detail needed to use this book as a real tool. The immunization schedule is current and detailed.

The glossary is a splendid thing and welcome to virtually all the users of the book.

Immunology seems to outgrow its dogma with speed. The authorship has kept up admirably.

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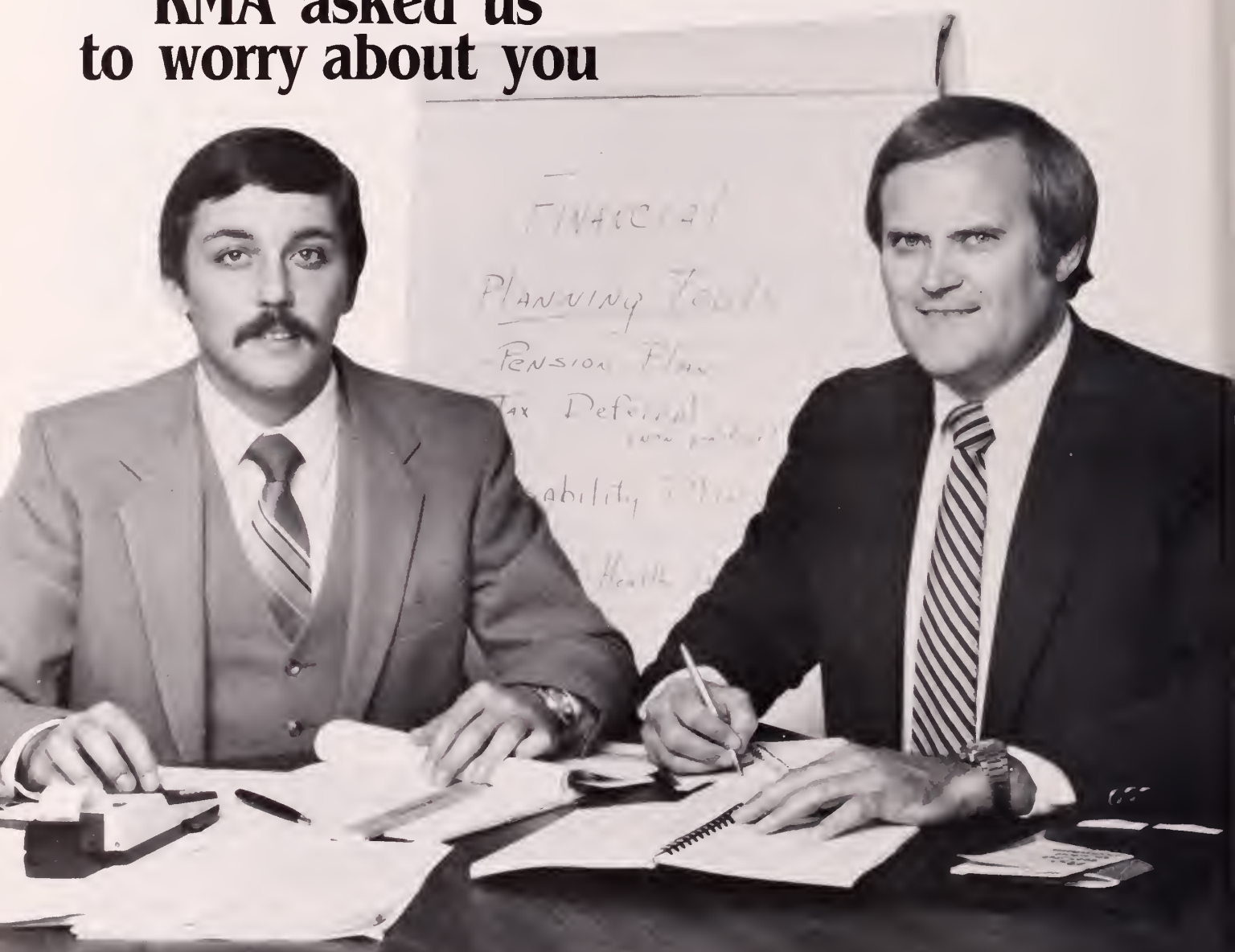
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LETTERS TO THE EDITOR

The Letters To The Editor column is a means for the KMA physicians to express their opinions and viewpoints on varied topics. If you have an item you would like brought before your fellow practitioners, please submit it to Letters To The Editor, Kentucky Medical Association, 3532 Ephraim McDowell Dr., Louisville, Kentucky 40205. Communications should not exceed 250 words. The right to abstract or edit is reserved by the editors of the *Journal*. Names will be withheld upon request, but anonymous letters will not be accepted.

To The Editor:

A 28-year-old male developed aphthous stomatitis two days after a cardio-pulmonary resuscitation (C.P.R.) course. It is hypothesized that the oral trauma suffered from an excessively tight mouth-to-mouth fit required for adequate ventilation of the manikin, induced this primary attack of aphthous stomatitis. It is theorized that a literature on CPR induced trauma will develop as more hospitals mandate annual CPR recertification.

Post Manikin Resuscitation Stomatitis

During the past 10 years there has been a virtual boom in CPR courses. Many hospitals are making it mandatory for their physicians to hold current CPR cards. Almost all programs require as part of the accreditation process simulated CPR on a manikin. Few cases of injury to the CPR testees have been reported. As increased numbers of people participate in CPR classes, one might predict more injuries will occur. We would like to report the first case of suspected primary aphthous stomatitis induced by CPR on a manikin.

Report of a Case

The patient was a 28-year-old Internal Medicine resident. He had no history of any medical or dental problems, particularly no past oral or skin lesions, no arthritis, no urethritis, no autoimmune disease, and no prosthetic dental equipment. He denied any allergies and was taking no medicines. He denied any sexual contacts or any professional contact during the past month with anyone with apparent mucosal lesions.

During an evening basic CPR course, the patient noticed that proper ventilation of the manikin required a very tight mouth-to-mouth fit. The patient felt as if his buccal mucosa was being bruised. The following day the area was mildly tender and on the second day painful ulcers were noted in this area. The lesions were in two sites consisting of four or five 2-3 mm ulcers with yellow bases circumscribed by wide erythematous margins (see picture one). The lesions were very painful. They lasted 12 to 14 days before disappearing, leaving an erythematous area which resolved during the following two weeks. No scars remained. Three primary care internists felt the lesions to be characteristic of aphthous stomatitis. The other two physicians using the manikin denied lesions. No fever, malaise or other systemic symptoms, adenopathy, or skin lesions accompanied the ulcers. Swab and culture of the lesions revealed no herpetic growth.

Comment

The literature on aphthous stomatitis is confusing, with frequent contradictory statements. It is felt by many to be an autoimmune disease, either idiopathic or secondary to an abnormal immunologic reaction to antigens of oral bacteria, particularly Streptococcus sanguis II A. Abnormalities in both immunoglobulin and T cell function have been shown in vitro and in vivo.[1]

Multiple studies have revealed that high socioeconomic status correlates with a marked increase in the incidence of aphthous stomatitis.[2] Hence, we can predict that the hospital medical staff is at markedly increased risk. Many experts also feel that trauma may induce aphthous stomatitis.[3]

Of course other explanations are possible. The ulcers may have been caused by direct trauma without aphthous stomatitis infliction or the aphthous stomatitis may have been contacted from asymptomatic individuals depositing the agent of infection on the manikin. We feel these possibilities are considerably less likely than the hypothesis that trauma induced the appearance of aphthous stomatitis.

Further reports of other cases of aphthous stomatitis induced by CPR may be expected, and, in fact, we expect a voluminous literature of morbidity to practitioners of CPR on manikins to develop as classes become more prevalent and older testees in



Photo #1

worse physical shape are compelled by hospital policy or state law to enroll in CPR classes.

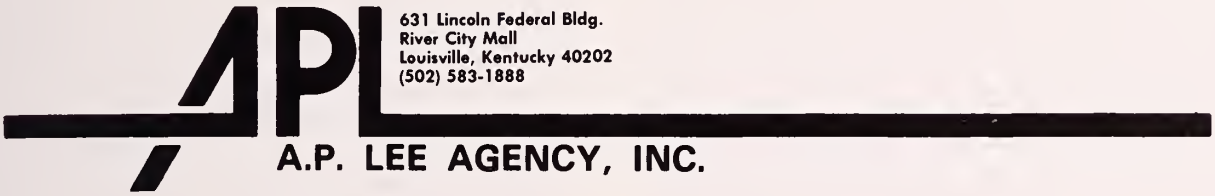
Richard Neiman, M.D.

References 1. Chapter by Breenberg Martin S.: *Burket's Oral Medicine,* Malcolm A. Lynch Editor. pp. 47-51. J. B. Lippincott Co., Philadelphia, 1977. **2.** Bhaskar, SN: *Synopsis of Oral Pathology,* pp. 368-370. C. V. Mosby Co., St. Louis, 1873. **3.** Ship Irwin I.: Epidemiologic aspects of recurrent aphthous ulcerations. *Oral Surgery* 33:3 400-416, March, 1972.

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Highlights of the 1982

Officers

At the 132nd KMA Annual Meeting the House of Delegates elected James B. Holloway, Jr., M.D., Lexington, and Charles C. Smith, Jr., M.D., Louisville as KMA President-Elect and Vice President respectively.

Doctor Holloway, a practicing general and thoracic surgeon, is Past President of the Fayette County Medical Society and has served KMA as Chairman of the Board of Trustees and Vice President in 1972-73. He is also a member of the Kentucky Medical Insurance Company Board of Directors.

Doctor Holloway is former chief of surgery at St. Joseph Hospital in Lexington and is currently on the medical staff of the University of Kentucky Medical School.

Vice President Charles C. Smith, Jr., M.D., an internist and assistant clinical professor at the University of Louisville, is Past President of the Jefferson County Medical Society and a 1955 graduate of the University of Louisville School of Medicine.

Richard F. Hench, M.D., a Lexington internist, was elected to a second consecutive term as Chairman of the Board of Trustees. He has served as Trustee and Alternate Trustee for the Tenth District.

Donald C. Barton, M.D., a family physician from Corbin, was named Vice President of the Board for 1982-83.

The KMA House of Delegates also elected three new Trustees: Albert H. Joslin, M.D., Owensboro—District Two; R. Kendall Brown, M.D., Georgetown—District Nine and Garner E. Robinson, M.D., Ashland—District Thirteen.



Charles C. Smith, Jr., M.D., Vice President (left) was elected Vice President by the KMA House of Delegates. Leading the House session were Speaker Bennett L. Crowder, II, M.D., (middle) and Vice Speaker Peter C. Campbell, Jr., M.D.

Wally O. Montgomery, M.D., First District Trustee and Robert E. Smith, M.D., Eighth District Trustee were both named to the Executive Committee.

Harold D. Haller, Sr., M.D. and Kenneth P. Crawford, M.D. both of Louisville were re-elected respectively as AMA Delegate and Alternate Delegate.

President's Luncheon

During the President's Luncheon Carl Cooper, Jr., M.D. was named recipient of the KMA Distinguished Service Award. Doctor Cooper of Bedford was praised for his many years of service to organized medicine. He has served as an Alternate Delegate to the AMA, Delegate to KMA, Speaker of the House of Delegates and President of KMA in 1978-79. Presently Doctor Cooper is Chairman of the Committee on State Legislative Activities, a member of the National Legislative Committee, Committee on Health Care Cost, Vice President of the Rural Kentucky



AMA Executive Vice President, James H. Sammons, M.D., was guest speaker during the President's Luncheon.

KMA Annual Meeting

Medical Scholarship Fund and Vice President of the Kentucky Medical Insurance Company.

Guest speaker at the President's Luncheon was AMA Executive Vice President James H. Sammons, M.D., who launched a stinging rebuttal to the Federal Trade Commission (FTC), media and Congressional critics opposition to pending legislation which would restrain the FTC's jurisdiction.

Doctor Sammons pointed out that the FTC was never intended or granted powers by Congress to control the learned profession. He also alluded to the fact that FTC activities may have had detrimental effects on the quality of care by limiting physician and medical society ability to comment on poor performance records in the practice of medicine.

House of Delegates

On September 20, during the first session of the House of Delegates, Ms. Dorothy Rush, Auxiliary Chairperson for the American Medical Association Education and Research Foundation presented checks to the two medical schools on behalf of the Auxiliary to the KMA from the AMA-ERF.

Auxiliaries across the country contribute annually to this fund which is then proportionally returned to medical schools for educational purposes. A check in the amount of $12,371.44 was presented to Doctor Roy Jarecke, Associate Dean for Academic Affairs at the University of Kentucky and to Doctor Richard Swigart, Director of the Division of Allied Health at the University of Louisville in the amount of $19,211.56.

Remarks were also made by Ballard W. Cassady, M.D., outgoing President; Mrs. Jacqueline Noonan, 1981-82 President of the Auxiliary; Richard F. Hench, M.D., Chairman of the Board of Trustees and student representatives from the University of Kentucky and the University of Louisville.

Reports of the KMA Committees and Resolutions were officially introduced and recognition was given to the many individual physicians serving on committees who had contributed time and effort during the year on behalf of the profession.

The second session of the House of Delegates convened on Wednesday evening with the main order of business being consideration of 42 Committee reports and 11 Resolutions. House of Delegates actions included:

- Development of a holding company which would offer a variety of services.



Carl Cooper, Jr., M.D. (right) was presented with the KMA Distinguished Service Award during the President's Luncheon by S. Randolph Scheen, M.D., Chairman of the Awards Committee.



Past President, Ballard W. Cassady, M.D., (left) congratulated Dwight L. Blackburn, M.D., KMA President for 1982-83.

Association

- Reaffirmed policy calling for equitable reimbursement for medical services provided by physicians.
- Support for the University of Louisville teaching hospital encouraging maintenance of teaching programs and provision of medical care to all patients regardless of ability to pay.
- Support for legislative enactment of the Model Uniform Death Act which would establish a legal definition of death.
- Adoption of a policy opposing solicitation of private patients and provision of routine services through health departments.
- Adoption of a resolution calling on the KMA Board of Trustees to maintain vigilant scrutiny of the development and progress of Citicare to assure the welfare of program recipients, to lend assistance to the Jefferson County Medical Society or any other society affected and recommended that introduction of the program should be delayed until perceived problems can be resolved.

Five physicians were elected by the House of Delegates to serve on the 1982 Nominating Committee. Members elected were: Chairman Carl Cooper, Jr., M.D., Bedford; James A. Baumgarten, M.D., Owensboro; Harold T. Faulconer, M.D., Lexington; Thomas L. Heavern, Jr., M.D., Highland Heights and Walter I. Hume, Jr., M.D., Louisville.

Attendance

Registration for the Annual Meeting was 1,890. General Scientific and Specialty Group sessions were well attended as were both sessions of the House of Delegates.

The 1983 KMA Annual Meeting is scheduled for September 19-22 at the Ramada Inn, Bluegrass Convention Center, Louisville.



From left to right: S. Randolph Scheen, M.D., Secretary-Treasurer; Ballard W. Cassady, M.D., Past President; James B. Holloway, Jr., M.D. President-Elect and Richard F. Hench, M.D., Chairman of the Board.



Chairman of the Board, Richard F. Hench, M.D., (left) administered the Presidents Oath of Office to Dwight L. Blackburn, M.D., during the President's Luncheon.



Winners of the Scientific Exhibits Award for Excellence during the Annual Meeting were: "Coronary Angioplasty and Coronary Thrombolysis," J. C. Sartini, M.D.; J. C. Harkness, M.D.; Allen L. Cornish, III, M.D.; Thomas F. Whayne, Jr., M.D., Lexington; "Psychomotor Skills: Instruction in Orthopaedic Surgery," David B. Stevens, M.D. and Connie Kahler, M.D., Department of Educational Development, University of Kentucky, Lexington and "Skin Malignancy," Ullin Leavell, M.D., Lexington. The exhibits were judged by the KMA Scientific Exhibit Committee.

Reference Committees met September 20 during the Annual Meeting to consider 42 Reports and 11 Resolutions.





Physicians had the opportunity to speak with representatives from more than 100 companies who exhibited at this years Annual Meeting.





AMA-ERF Auxiliary Chairperson, Ms. Dorothy Rush presented checks to Doctor Richard Swigart, Director of the Division of Allied Health at U. of L. (left) and to Doctor Roy Jarecke, Associate Dean for Academic Affairs for U. of K.

September 23, 1982

Robert G. Cox
Executive Vice President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Mr. Cox:

I would like to thank you for inviting me to participate in the 132nd Annual Convention of the Kentucky Medical Association. It was an honor and a privilege to be asked to speak to this group. We were treated wonderfully while we were down in Kentucky the entire time. I am very impressed with the way the meeting was run and the service at the Hyatt Regency in Lexington. I would like to thank you for the framed Kentucky Derby picture. I plan to hang the picture in my office. Both my wife and I had a very pleasant stay in Kentucky.

Sincerely,
Clyde E. Blackard, M.D.

Mr. Robert G. Cox
Executive Vice President
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

Dear Bob:

I would like to take this opportunity to thank all members of KMA, and the KMA Staff, for the high honor accorded me at the President's Luncheon on September 22nd, when I was presented the Distinguished Service Award.

To be awarded such an honor for fullfilling a responsibility to my profession and enjoying it so much is more than one could ever anticipate.

I have enjoyed all the years of my association with the Kentucky Medical Association and its excellent staff and am looking forward to many more.

Thanks to all of you,

Sincerely,
Carl Cooper, Jr., M.D.

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1982 House of Delegates
KMA Annual Meeting

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		First Session	Second Session
Speaker	Bennett L. Crowder, II	Present	Present
Vice Speaker	Peter C. Campbell, Jr.		Present
President	Ballard W. Cassady	Present	Present
President-Elect	Dwight L. Blackburn	Present	
Vice-President	Sam D. Weakley	Present	Present
Secretary-Treasurer	S. Randolph Scheen	Present	Present
Delegate to the AMA	David B. Stevens	Present	
Delegate to the AMA	Fred C. Rainey	Present	Present
Delegate to the AMA	Harold D. Haller, Sr.	Present	Present
Alternate Delegate to the AMA	Kenneth P. Crawford	Present	Present
Alternate Delegate to the AMA	Wally O. Montgomery	Present	Present
Alternate Delegate to the AMA	Lee C. Hess	Present	Present

TRUSTEES

District			
First	Wally O. Montgomery	Present	Present
Second	R. J. Phillips	Present	Present
Third	Henry R. Bell	Present	Present
Fourth	Thomas R. Taylor		
Fifth	Bob M. DeWeese		Present
Sixth	Nelson B. Rue	Present	Present
Seventh	William P. McElwain		Present
Eighth	Robert E. Smith	Present	Present
Ninth	Don R. Stephens	Present	Present
Tenth	Richard F. Hench	Present	Present
Eleventh	Don E. Cloys		Present
Twelfth	Danny M. Clark		
Thirteenth	Howard B. McWhorter	Present	Present
Fourteenth	Roger D. Akers	Present	Present
Fifteenth	Donald C. Barton	Present	Present

ALTERNATE TRUSTEES

District			
First	John D. Noonan	Present	Present
Second	Albert H. Joslin	Present	Present
Third	Sam H. Traughber		
Fourth	John W. Ratliff	Present	
Fifth	E. Dean Canan		
Sixth	J. Michael Pulliam		Present
Seventh	Cecil D. Martin	Present	Present
Eighth	William R. Yates	Present	Present
Ninth	R. Kendall Brown	Present	Present
Tenth	Colby N. Cowherd		Present
Eleventh	Clifford F. Kerby		
Twelfth	David C. Liebschutz	Present	Present
Thirteenth	Ranjit Sinha	Present	Present
Fourteenth			
Fifteenth	Emanuel H. Rader	Present	Present

PAST-PRESIDENTS

Past President	Frank R. Pitzer	Present	Present
Past President	Robert S. Howell		
Past President	Carl Cooper, Jr.	Present	Present
Past President	John P. Stewart		
Past President	Paul J. Parks	Present	Present

DELEGATES

FIRST DISTRICT

		First Session	Second Session
BALLARD			
CALLOWAY	Charles D. Clark	Present	Present
	Robert Gary Marquardt	Present	Present
CARLISLE			
FULTON			
GRAVES	C. Douglas LeNeave		
HICKMAN			
LIVINGSTON	Stephen Burkhart		
MCCRACKEN	C. Dale Brown	Present	Present
	Larry C. Franks	Present	Present
	John Kraus	Present	Present
	Gary McMillan	Present	
	John D. Noonan	Present	Present
MARSHALL	Keith E. Ellis	Present	Present

SECOND DISTRICT

DAVIESS	James E. Anderson	Present	Present
	Angela Jarvis	Present	Present
	Michael Kavolus	Present	Present
	Tom Maddox	Present	Present
	R. John Sanders	Present	Present
HANCOCK	B. Presley Smith		
HENDERSON	Kenneth M. Eblen		
	John McClellan	Present	Present
MCLEAN			
OHIO	Robert E. Norsworthy	Present	Present
UNION			
WEBSTER			

THIRD DISTRICT

CALDWELL	N. H. Talley	Present	Present
CHRISTIAN	Charles Barlowe		
	Neal Calhoun		Present
	Delmas Clardy	Present	Present
	James F. Rozelle	Present	Present
	George W. Thomas	Present	
CRITTENDEN			
HOPKINS	W. R. Alexander		Present
	R. K. Bachman	Present	Present
	C. R. Dodds	Present	Present
	W. H. Klompus	Present	Present
LYON	R. W. Hodge	Present	Present
MUHLENBERG	James S. Brashear	Present	Present
TODD	Larry Brock		
TRIGG	Eduardo Pavon	Present	Present

FOURTH DISTRICT

BRECKINRIDGE	James G. Sills		
BULLITT	James R. Cundiff		
GRAYSON	Victor F. Duvall	Present	Present
GREEN	Robert P. Simmons		
HARDIN-LARUE	William M. Carney	Present	Present
	Lucian Moreman	Present	Present
	Jerry R. Smith	Present	Present
HART	Evelyn Salisbury	Present	
MARION	J. W. Ratliff	Present	
	Robert H. Wilbur		Present
MEADE	Richard L. O'Connell		
NELSON	Fredricka C. Lockett	Present	Present
TAYLOR	Eugene H. Shively	Present	
WASHINGTON			

FIFTH DISTRICT

JEFFERSON	William Stephen Aaron		
	Berel Abrams		
	Richard Allen	Present	Present
	Billy Andrews	Present	Present
	James G. Baker		Present
	Arnold Belker		
	Ben M. Birkhead		
	David H. Bizot		Present
	Harold W. Blevins		
	Glenn W. Bryant		Present
	Jerry B. Buchanan		Present
	John L. Bunting		
	W. Cooper Buschemeyer, Jr.		Present
	Peter C. Campbell, Jr.		Present
	E. Dean Canan		
	James Childers	Present	
	Bob M. DeWeese		Present
	Larry Florman		Present
	Gary Fox		
	Daniel P. Garcia	Present	Present
	Lawrence Goldberg		
	Robert R. Goodin		Present
	Larry P. Griffin		Present
	John J. Guarnaschelli		
	Martha Keeney Heyburn		
	Lonnie W. Howerton		
	John G. Hubbard		
	Walter I. Hume, Jr.		Present
	Arthur T. Hurst, Jr.		Present
	Thomas Jones		Present
	Jerome P. Lacy	Present	Present
	Theodore Lynch		Present
	Russell May		Present
	Edward N. Maxwell		Present
	Roy J. Meckler		Present
	Robert A. Noel		
	Robert L. Nold, Sr.		Present
	John D. O'Brien		
	Lynn L. Ogden	Present	Present
	Henry W. Post		
	James E. Redmon, Jr.		Present
	Grady Rowntree		Present
	Robert M. Senese		Present
	Charles C. Smith, Jr.		Present

	Gerald F. Sturgeon		
	Walter L. Thompson		
	Robert S. Tillet		Present
	Lucy S. Tyler		
	Donald T. Varga		
	Will W. Ward		
	Tom R. Watson	Present	Present
	Lolita Weakley	Present	Present
	Sam D. Weakley	Present	Present
	William E. Yancey		
	Walter H. Zukof		Present
	SIXTH DISTRICT		
ADAIR	Anastacio Herrara, Jr.		Present
ALLEN	Earl P. Oliver	Present	Present
BARREN	Howard Edgin		
	Daryl P. Harvey	Present	Present
BUTLER	Richard T. C. Wan		
CUMBERLAND	Sam Rice	Present	Present
EDMONSON	Omkar Bhatt		
LOGAN	Lewis Martin		
METCALFE	L. P. Emberton		
MONROE	James E. Carter		
SIMPSON	J. Michael Pulliam	Present	Present
WARREN	John Downing	Present	Present
	Jerry Martin	Present	Present
	SEVENTH DISTRICT		
ANDERSON			
CARROLL	Cecil D. Martin	Present	Present
FRANKLIN	John Paul Broderson	Present	Present
	George Hromyak	Present	Present
	Willis P. McKee, Jr.	Present	Present
GALLATIN			
GRANT	Daryl B. Shipp		
HENRY	Robert L. Houston, Jr.	Present	Present
OLDHAM	Edward G. Houchin	Present	Present
OWEN			
SHELBY	Willis P. McKee	Present	Present
SPENCER	William K. Skaggs		
TRIMBLE	Carl Cooper, Jr.	Present	Present
	EIGHTH DISTRICT		
BOONE	Herbert Francis	Present	Present
	Don Swikert	Present	Present
CAMPBELL-KENTON	Gordon W. Air	Present	Present
	Richard Allnutt	Present	Present
	Carl John Brueggmann	Present	
	Frank Garamy, Jr.	Present	Present
	Thomas Heavern, Jr.	Present	Present
	Howard A. Herringer, Jr.	Present	Present
	William B. Monnig	Present	Present
	Fred A. Stine	Present	Present
	Raymond J. Timmerman	Present	
	NINTH DISTRICT		
BATH			
BOURBON	William Cox	Present	Present
BRACKEN	Milton Brindley		
FLEMING	Robert W. Fidler		
HARRISON	Don R. Stephens	Present	Present
MASON	Claude E. Cummins, Jr.		
NICHOLAS	W. R. Kingsolver		
PENDLETON	Robert L. McKenney	Present	Present
ROBERTSON			
SCOTT	Robert Kendall Brown	Present	Present
	TENTH DISTRICT		
FAYETTE	Joseph P. Bark	Present	Present
	Robert P. Belinep		Present
	M. Cary Blaydes	Present	Present
	Christopher A. Boarman	Present	Present
	P. P. Bosomworth	Present	Present
	Michael E. Daugherty		Present
	Marcus L. Dillon	Present	Present
	Glenn U. Dorroh	Present	Present
	Harold T. Faulconer	Present	Present
	Thomas M. Jarboe	Present	Present
	V. R. Jenkins	Present	Present
	Sally Mattingly	Present	Present
	Edgar McGee	Present	Present
	William R. Meeker, Jr.	Present	Present
	Charles H. Nicholson	Present	Present
	Edwin J. Nighbert	Present	Present
	John D. Perrine	Present	Present
	Thomas K. Slabaugh	Present	Present
	Russell Travis	Present	Present
	John E. Trevey	Present	Present
JASSAMINE	Gary Wallace	Present	Present
WOODFORD	William J. Graul		
	ELEVENTH DISTRICT		
CLARK			
ESTILL			
JACKSON	Philip Curd		
LEE	Arnold Taulbee		
MADISON	Clifford Kerby		
	William H. Mitchell		
MENIFEE			
MONTGOMERY	Laddie Tackett		
OWSLEY	Mildred B. Gabbard	Present	Present
POWELL	Sam Cecil		
WOLFE	Paul F. Maddox		Present
	TWELFTH DISTRICT		
BOYLE	David C. Liebschutz	Present	Present
	Scott Scutchfield	Present	Present
CASEY	Lewis E. Wesley	Present	Present
CLINTON	Floyd B. Jay	Present	Present
GARRARD	Paul Sides	Present	Present
LINCOLN	Charles C. Crase		Present
McCREARY			
MERCER	George W. Noe	Present	
PULASKI	Veryl Frye	Present	Present
	Mel Medrosa		
ROCKCASTLE	George W. Griffith		
RUSSELL	Rick Miles	Present	Present
WAYNE	John W. Simmons		Present
	THIRTEENTH DISTRICT		
BOYD	Walter L. Cawood	Present	
	Jerald M. Ford	Present	Present
	Garner E. Robinson	Present	Present
CARTER			
CASEY	Lewis E. Wesley	Present	Present
ELLIOTT	John F. Greene		
GREENUP	John Jones	Present	
	Manual Garcia		Present
LAWRENCE			
LEWIS			
MORGAN	Alec Spencer		
ROWAN	Ranjit Sinha	Present	Present
	FOURTEENTH DISTRICT		
BREATHITT			
FLOYD	Larry Leslie	Present	
	Gangadhar Maddiwar	Present	Present
JOHNSON	Nabil Basha		
KNOTT			
LETCHER	Carl Pigman	Present	Present
MAGOFFIN			
MARTIN	Raymond D. Wells		
PERRY	Donnie Spencer		
PIKE	George Buckley	Present	Present
	Russell Davis	Present	Present
	William Johnson	Present	Present
	FIFTEENTH DISTRICT		
BELL	Charles Moore		
	Kenneth Smith	Present	Present
CLAY	W. E. Becknell		
HARLAN	R. S. Howard	Present	
	Milo Schosser		
	Paul M. Walstad		
KNOX	Rogelio A. Acosta		Present
	Rufino Crisostomo	Present	
LAUREL	William D. Pratt		Present
LESLIE	Anne A. Wasson	Present	Present
WHITLEY	R. D. Pitman	Present	Present
	Carmel Wallace	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 20 and 22.

MEMBERS IN THE NEWS

NEW MEMBERS

ALLEN

Curtis H. Smith, M.D.

BOYLE

Scott B. Scutchfield, M.D.

HENDERSON

Larry G. Crick, M.D.

JEFFERSON

Rex Allen Cox, M.D.
Robert H. Gushard, M.D.
William D. Harris, M.D.
Lawrence M. Jones, M.D.
Charles F. Mahl, M.D.
Byron J. Masterson, M.D.
Mario Mayo, M.D.
Mario J. Moreno, M.D.
Carroll L. Witten, Jr., M.D.

KNOX

Stephen Boyd Gill, M.D.

LETCHER

John L. Pellegrini, M.D.

ROCKCASTLE

Brian R. Badduke, M.D.
Peter J. Monteyne, M.D.

ROWAN

Jane Dickerman, M.D.

SCOTT

Timothy C. Brown, M.D.

SPENCER

James W. Price, M.D.

Leopold B. Leblique, M.D., Louisville, was recently appointed Medical Director of the Geriatric Evaluation Unit of the Family Practice Department, University of Louisville School of Medicine. Doctor Leblique supervises the residents in geriatrics care and has introduced nursing home patients into the residency program. Doctor Leblique is a graduate of Leopold-Franzens University in Innsbruck, Austria and is a Diplomate of the American Board of Family Practice as well as a Fellow of the American Academy of Family Physicians.

IN MEMORIAM

CHARLES F. BLANKENSHIP, M.D.
Louisville

Charles F. Blankenship, M.D., died Friday, October 1, at Methodist Evangelical Hospital in Louisville. Doctor Blankenship was a 1932 graduate of the University of Louisville Medical School. He was a regional health director of the U.S. Public Health Service in San Francisco before coming to Louisville, when he was named chairman of the University of Louisville Medical School's department of community health in 1961. He was appointed deputy health commissioner of the state Health Department in 1967, then returned to his post as chairman of U of L's department of community health in 1971 and retired in 1974. Doctor Blankenship was a member of the Jefferson County Medical Society, the American Medical Association, the U.S. Public Health Association and had been a member of KMA since 1962.

NEWS

CONCERN ABOUT MEDICAL COSTS IS INCREASING among physicians and the general public alike, according to a survey conducted by the AMA Division of Federation and Public Relations.

In interviews with randomly selected physicians, 58% said they considered cost to be the main problem facing medicine today. Last year, by comparison, 44% rated cost as the main problem.

Data collected by the AMA since 1977 indicate that the public is becoming less concerned about access to medical care and the quality of care, and more concerned about cost. In 1,504 telephone interviews this year with randomly selected public respondents, 62% said that the main problem facing health care and medicine was cost. Last year, 55% said cost was the main problem. Nearly half (47%) of the American people believe that not enough of society's resources are being directed for health care, the survey found. Very few (16%) felt that too much is being spent. Health care, however, is not the public's highest priority when it comes to spending more money. Public respondents gave a higher ranking to education, the environment, and financial assistance to the poor.

While only 6% of the physicians believe that there are too few physicians in their communities, more than a third of the public continues to believe that there are too few physicians. While 73% of the physicians believe that there is or will be a local surplus of physicians in certain specialties, there is almost no public support for the position that the medical profession may become oversupplied. The majority (52%) of the American public feels that there is an adequate supply of physicians at the present time.

The survey confirmed that the largest competitor to traditional physician services is the hospital outpatient clinic. One in four people, or 25% of the public responders, obtained medical care in a clinic setting within the last year, while only 5% of the general population belonged to a prepaid plan or HMO.

For the second consecutive year, physicians reported major increases in hospital outpatient services. The number of surgical centers is also up substantially.

PRESCRIPTION DRUGS DISPENSED BY PHYSICIANS are subject to the child protection packaging standards of the Poison Protection Packaging Act in the same manner as prescription drugs dispensed by pharmacists, the U.S. Consumer Product Safety Commission said. "A physician is responsible under law for dispensing prescription drugs in child-restraint packaging," the advisory said.

Conventional packaging may be provided to the consumer either at his request or at the direction of the prescribing physician. This does not, however, exempt drugs dispensed by physicians. It allows physicians to make exceptions for elderly and handicapped people who would be unable to gain access to the drug if it were dispensed in child-restraint packaging.

REGISTRATION LIMITED TO 300 PARTICIPANTS

Special Seelbach rates for participants—$50.00 single or double if reserved prior to February 20, 1983

The TURNING POINT Conference is open to all members of the Kentucky Medical Association, their spouses and other medically-related groups. A registration fee of $125.00 per person, or $200.00 for physician and spouse, will be charged and will include lunch and dinner on March 16 and lunch on March 17. Lodging reservations may be obtained by contacting The Seelbach Hotel at 800-626-2032 or 502-585-3200.

PLEASE REGISTER ME FOR THE CONFERENCE (INCLUDE PAYMENT WITH REGISTRATION FORM)

☐ Member ☐ Other, please specify

☐ Spouse _____

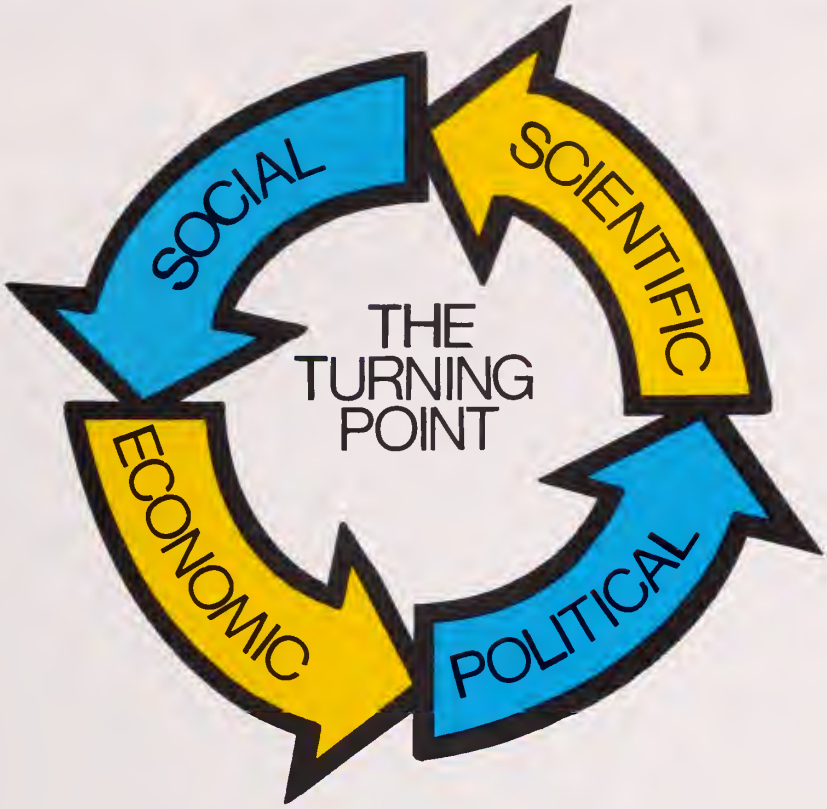
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3532 Ephraim McDowell Drive
Louisville, KY 40205

CME ACCREDITATION PENDING

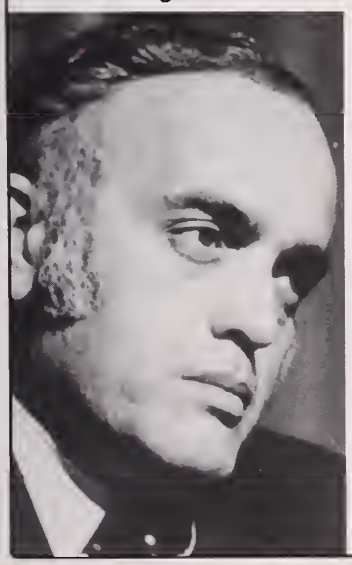


MARCH 16-17, 1983
A CONFERENCE DESIGNED TO EXPLORE CURRENT TRENDS AND THEIR IMPACT UPON FUTURE MEDICAL PRACTICE

THE PAST MEETS THE FUTURE

The grand, restored Seelbach Hotel hosts this outstanding Conference at a special rate for participants. Registration is limited to 300 participants. See adjoining page for registration.

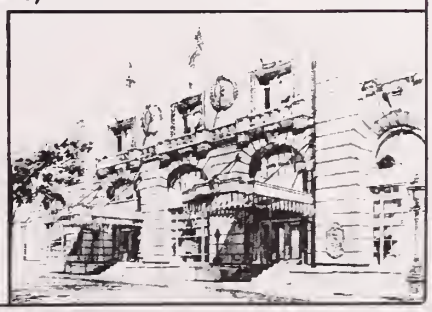
Keynote Speaker
Robert Novak
Washington Columnist



OUTSTANDING NATIONAL SPEAKERS

- ***THE GERIATRIC IMPERATIVE**
 Anne Somers, M.D., Rutgers University
- ***COMPETITION IN HEALTH CARE**
 Paul Feldstein, Ph.D., University of Michigan
- ***FUTURE REALITIES FOR PATIENTS, PHYSICIANS, HOSPITALS**
 John Velkins, Naisbett Associates, Denver, Colorado
- ***THE FUTURE OF ORGANIZED MEDICINE**
 Edward Annis, M.D., Miami Shores, Florida

Seelbach Hotel



Pinworms work the night shift



Artist's interpretation:
The nocturnal egg-laying of the female pinworm causes acute perianal itch...making children shift sleeplessly through the night.

Put pinworms out of work...

Promptly paralyzes pinworms and roundworms

Antiminth® (pyrantel pamoate) has a unique, rapid immobilizing effect on worms. Unlike mebendazole, which blocks glucose uptake—slowly "starving" helminths to death—Antiminth quickly acts on the neuromuscular junction to promptly paralyze parasites.

97% efficacy with a single dose

A single dose of Antiminth delivers rapid clinical and parasitological cures, "Single doses... showed high overall efficacy against *Enterobius vermicularis* (97.2%) and *Ascaris lumbricoides* (97.5%)."[1]

Simple, well tolerated therapy

Antiminth offers ease of administration and patient tolerance. "...when compared to the other single dose agents available, [Antiminth] has the advantage of being non-staining and may be better tolerated."[2]

The dosage form children like

Antiminth is available as a pleasant tasting, caramel-flavored oral suspension. Effective in just



one dose against pinworm and roundworm—in both children and adults—Antiminth is easy-to-administer and easy-to-take.

Respected around-the-world

In some parts of the world, large populations are afflicted with helminthic infections. Physicians in endemic areas have become experts on parasitic diseases—and have come to rely on Antiminth for the rapid cure of infestations. Antiminth is recommended as an agent of first choice for pinworm and roundworm by leading medical authorities.[3]

Warnings

Usage in Pregnancy Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions

Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions

The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration

Children and Adults Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

References 1. Pitts NE, Migliardi JR: *Clinical Pediatrics* 13:87, 1974. **2.** Modell W: *Drugs of Choice* 1980-1981. C. V. Mosby Co., St. Louis, 1980, p. 362. **3.** Goodman LS, Gilman A: *The Pharmacologic Basis of Therapeutics*, 6th edition, MacMillan Publishing Co., Inc., New York, 1980, p. 1032.

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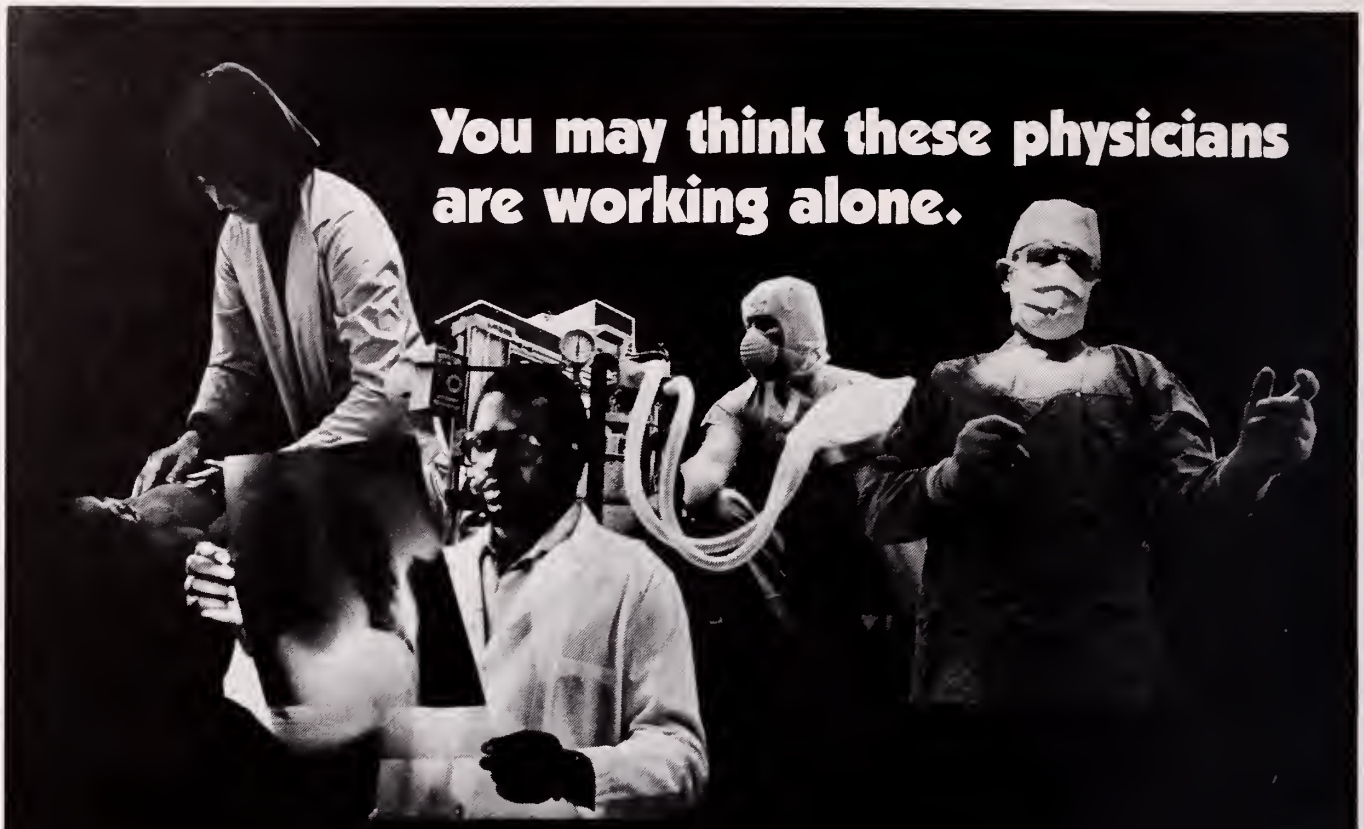
Prescribe Antiminth® Suspension

50 mg pyrantel base/ml

(pyrantel pamoate)

Cures pinworm and roundworm fast...with a single dose

SJW638



But they really have a team behind them.

These physicians spend most of their day working independently in a one-to-one doctor/patient relationship. And chances are that as a physician, you do too.

But even though you can't see it, there's a strong team supporting and protecting the medical profession, affecting your practice while you see patients, research new drugs or perform surgery. That team consists of *your medical societies*.

The American Medical Association and your state and county medical societies believe in the value of teamwork; that only by working together can we, in the face of an increasingly complex professional environment, protect your right to make responsible decisions on how to practice medicine.

We also believe that all medical societies — county, state, and national — have certain tasks that the individual physician couldn't possibly assume — and shouldn't have to.

Tasks such as keeping government regulations from interfering with your practice by representing your interests at local and national levels. And challenging regulatory measures that threaten you and your patients' interests by mounting legal campaigns to defend your rights — up to the Supreme Court if necessary.

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For more information, contact your state or county medical societies, or call the AMA collect at 312/751-6196. Or return the coupon below to your state or county medical society.

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The T. B. Greenley Memorial Meeting of the Kentucky Medical Association

Hyatt Regency Hotel, Lexington Convention Center
Lexington, Kentucky, September 20-23, 1982

Digest* of Proceedings of the Regular Session of the

House of Delegates

Bennett L. Crowder, II, M.D., Hopkinsville
Speaker of the House, Presiding

First Meeting

Speaker Crowder called the first meeting of the 132nd Session of the KMA House of Delegates to order at 9:10 a.m. Monday, September 20, 1982, and asked Victor F. Duvall, M.D., Clarkson, to give the invocation. He then called on R. Gary Marquardt, M.D., Murray, Chairman of the Credentials Committee. Doctor Marquardt reported that a quorum was present. A motion was made, seconded, and carried that the Minutes of the 1981 session of the House of Delegates be approved as published in the December 1981 *Journal of the Kentucky Medical Association.*

S. Randolph Scheen, M.D., Louisville, Secretary-Treasurer, gave several announcements. He stated that scientific sessions would begin at 8:50 a.m. Tuesday in the Convention Center; and stressed that the highlight of the Annual Meeting, the President's Luncheon, would be held at 11:50 a.m. on Wednesday, at which time the new KMA President would be installed. Doctor Scheen reminded the Delegates that the Nominating Committee for general officers would meet at the close of the first meeting of the House, and Reference Committees would convene at 2:00 p.m. on Level B of the Hyatt Regency Hotel.

Doctor Scheen read a list of member physicians who had died since the 1981 session of the House of Delegates, following which the members of the House stood for a moment of silent tribute. The names of the physicians are as follows:

Spafford Ackerly, Louisville
William Ashbrook, Louisville
Francisco J. Bajandas, Louisville
George N. Burger, Covington
William H. Cartmell, Maysville
H. Davis Chipps, Lexington
Davis Hunter Coleman, Harrodsburg
Cooley, L. Combs, Hazard
Jack R. Coyer, Paducah
T. Garrett Craft, Harlan
Nora D. Dean, Louisville
John E. Dunn, Paducah
George F. Dwyer, Jr., Louisville
Daniel E. Earley, Covington
Frederick Eberson, Lexington
W. Gerald Edds, Bowling Green
Oliver H. Fearing, Ashland
James D. Foley, Loyall
David Goldblatt, Out of State
William L. Harris, Russellville
John S. Harter, Louisville
John E. Haynes, Madisonville
Stuart Price Hemphill, Danville
Napoleon M. Imperial, Whitesburg
Robert Fulton Jasper, Somerset
Duncan Johnson, Owensboro
Nina Kateryniuk, Louisville
Roscoe I. Kerr, Louisville
Wiley E. Kozee, Ashland
T. G. Kraft, Harlan
Richard E. Mudd, Louisville
Karl M. Neudorfer, Ashland
William W. Nicholson, Louisville
T. Jefferson Overstreet, Lexington
Alma L. Roby, Louisville
Seymour Hopper Rowland, Ocala, FL
Howard L. Shanklin, Louisville
Laura E. Sheaffer, Louisville
Richard R. Snowden, Ravenna
Irvin H. Sonne, Louisville
George R. Tanner, Jr., Louisville
John T. Tcheng, Ft. Thomas
U. Ray Ulferts, Louisville
James M. Wygal, Louisville

Editorial Note: A tape recording was made of the two meetings of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recordings.

Glenn U. Dorroh, M.D., Lexington, Chairman of the Rules Committee, was recognized who presented the following report:

Report of the Rules Committee of the House of Delegates

The Rules Committee of the House of Delegates recommends the following new rule (Recommendation #1), in order to implement Chapter IX, Section 3, of the Bylaws, which reads as follows:

> All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are approved by the motion or resolution.

Glenn U. Dorroh, M.D., Chairman

RECOMMENDATION:

1. All committee recommendations and resolutions requiring the expenditure of money shall contain a fiscal note, as appropriate. Committees making recommendations or authors of resolutions may seek the assistance of the Secretary Treasurer to determine if a fiscal note is necessary and the amount of money needed to implement objectives stated. Fiscal notes shall be stated separately from the body of the committee report or resolution.

A motion was made, seconded, and carried that the report of the Rules Committee be adopted.

Doctor Campbell read the names of those serving on 1982 Reference Committees, and reported that Tellers for both meetings would be Earl P. Oliver, M.D., Scottsville, Chairman; William M. Carney, M.D., Elizabethtown; and Paul J. Sides, M.D., Lancaster.

Doctor Crowder introduced Mrs. Dorothy Rush, AMA-ERF Chairperson who presented checks on behalf of the Auxiliary to representatives of Kentucky's two medical schools. Doctor Roy Jarecky accepted a check for $12,371.34 on behalf of the University of Kentucky College of Medicine; and Doctor Richard H. Swigart accepted a check for $19,211.56 to benefit the University of Louisville School of Medicine.

Gary Browning, Chairman of the Medical Student Section Governing Council, reported on MSS activities, and stated its formation has provided an effective tool for student participation in KMA. He urged adoption of the Medical Student Section Constitution and Bylaws which would be considered by the House on Wednesday.

Richard F. Hench, M.D., Chairman of the Board of Trustees, reported that the Board had voted the previous day to raise the 1983 voluntary Legal Trust Fund assessment to $10 from $3 as it had been in previous years. Doctor Hench informed the House members that the balance in the Fund was $16,398.42, as the Board had authorized expenditures of $47,325.66 since August.

Doctor Hench also read the following Resolution adopted by the Board of Trustees at its meeting on September 19, 1982, for the information of the House:

Resolution

Fee Review

BE IT RESOLVED, that the Board of Trustees of the Kentucky Medical Association recommends to the Judicial Council of KMA and directs the Claims and Utilization Review Committee of the KMA and any other peer review committees acting under the auspices of the KMA to discontinue any peer review activities relating to determination of usual, customary or reasonable medical fees or any ethical considerations of medical fees. This restriction shall not apply to peer review of quality, utilization or appropriateness of medical care where such are put in question within the jurisdiction of any such committees. This determination is made by the Board of Trustees based on the advice of counsel and recent United States Supreme Court decisions and will be modified at such time as the legal threats to peer review have been removed.

The Kentucky Chapter of the American Association of Medical Assistants hosted a coffee break in the lobby for the House members.

Following the short recess, Doctor Crowder read a list of reports indicating to which Reference Committee each was assigned, as noted below: (Only the reports of the officers are read.)

Report Number		Reference Committee
1	Report of the President Ballard W. Cassady, Pikeville	1
2	Report of the President, Auxiliary to KMA Mrs. John D. Noonan, Paducah	1
3	Report of the President-Elect Dwight L. Blackburn, Berea	1
4	Report of the Speaker of the House Bennett L. Crowder, II, Hopkinsville	1
5	Report of the Chairman, Board of Trustees Richard F. Hench, Lexington	1

6 Report of the Secretary-Treasurer 1
S. Randolph Scheen, Louisville

7 Report of the Editor 1
A. Evan Overstreet, Louisville

8 Report of the Delegates to AMA 1
David B. Stevens, Lexington

9 Report of the Executive Vice President 1
Robert G. Cox, Louisville

10 Advisory Committee to AKMA 1
Frank R. Pitzer, Hopkinsville

11 Kentucky Medical Insurance Company 1
Board of Directors
Ballard W. Cassady, Pikeville, Chairman

12 KMA Insurance Agency, Inc., Board of Di- 1
rectors
Dwight L. Blackburn, Berea, Chairman

13 Scientific Program Committee 2
James A. Baumgarten, Owensboro, Chairman

14 Scientific Exhibits Committee 2
Richard A. Kielar, Lexington, Chairman

15 Continuing Medical Education Committee 2
Stuart Graves, Jr., Louisville, Chairman

16 Cancer Committee 2
P. Raphael Caffrey, Lexington, Chairman

17 Hospital Committee 2
Royce E. Dawson, Owensboro, Chairman

18 Emergency Medical Care Committee 2
E. Truman Mays, Somerset, Chairman

19 Interspecialty Council 2
Paul J. Parks, Bowling Green, Chairman

20 Maternal Mortality Study Committee 3
John W. Greene, Lexington, Chairman

21 Committee on National Legislative Activ- 3
ities
Fred C. Rainey, Elizabethtown, Chairman

22 Committee on State Legislative Activities 3
Carl Cooper, Jr., Bedford, Chairman

23 Committee on Impaired Physicians 3
David L. Stewart, Louisville, Chairman

24 Committee on Long-Term Care 3
Robert E. Smith, Covington

25 President, Blue Cross and Blue Shield 4
Avil L. McKinney, Louisville

26 Committee on Medical Insurance and 4
Prepayment Plans
Earl P. Oliver, Scottsville, Chairman

27 Committee on Claims and Utilization Re- 4
view
William J. Sandman, Louisville, Chairman

28 Coordinating Commission on Peer Review 4
Activities
Glenn W. Bryant, Louisville, Chairman

29 Committee on Health Care Costs 4
Walter I. Hume, Jr., Louisville, Chairman

30 Committee on Maternal and Child Health 5
Van R. Jenkins, Lexington, Chairman

31 Committee on Medical and Other Gov- 5
ernmental Medical Programs
Paul J. Parks, Bowling Green, Chairman

32 Committee on HSAs 5
Harold L. Bushey, Barbourville, Chairman

33 Technical Advisory Committee on Physi- 5
cian Services (Title XIV)
Harold L. Bushey, Barbourville, Chairman

34 Committee on Community and Rural 5
Health
Don R. Stephens, Cynthiana, Chairman

35 Committee on School Health, Physical Ed- 5
ucation, and Medical Aspects of Sports
R. Quin Bailey, Danville, Chairman

36 Advisory Committee to DHR 6
Richard F. Hench, Lexington, Chairman

37 Judicial Council 6
Glenn W. Bryant, Louisville, Chairman

38 Rural Kentucky Medical Scholarship Fund 6
Board of Directors
Henry S. Spalding, Louisville, Chairman

39 Physician-Attorney Liaison Committee 6
Thomas M. Marshall, Louisville, Chairman

40 Membership Committee 6
Harold D. Haller, Sr., Louisville, Chairman

41 Placement Services Committee 6
John M. Baird, Danville, Chairman

42 Committee on Constitution and Bylaws 6
Robert L. McClendon, Louisville, Chairman

43 McDowell House Board of Managers 6
Laman A. Gray, Sr., Louisville, Chairman

NEW BUSINESS

New Business was presented to the House by the Vice Speaker and referred to the Reference Committee indicated:

Resolution	Title	Submitted by	Reference Committee
A	Dissolution of KPRO	Campbell-Kenton	4
B	Health Insurance Mental Illness Benefits	Franklin County	4
C	Nuclear Weapons	William P. VonderHaar, MD	5
D	University of Louisville Hospital	Jefferson County Medical Society	2
E	Discrimination Re: Hospital-Owned Office Buildings	Jefferson County Medical Society	6
F	Citicare	Jefferson County Medical Society	5
G	Physician Participation in Medical Insurance Programs	William B. Monnig, M.D.	4
H	Model Uniform Death Act	Pennyrile	3
I	Citicare	Board of Trustees	5
J	Medical Services Provided by Health Departments	Board of Trustees	5
K	Governor's Coalition of Payors to Address Health Care Costs	Board of Trustees	4

Vice Chairman Campbell announced the meeting places for the Nominating Committees and for the Trustee Districts electing Trustees and Alternates. He stated the Nominating Committee would report at the close of the first scientific session on Tuesday morning.

The physicians on the Nominating Committee were named as follows: Carl Cooper, Jr., M.D., Bedford, Chairman; James A. Baumgarten, M.D., Owensboro; Harold T. Faulconer, M.D., Lexington; Thomas L. Heavern, Jr., M.D., Highland Heights; and Walter I. Hume, Jr., M.D., Louisville.

Sam D. Weakley, M.D., Vice President, reported that the KMA Board had reached 100% membership in KEMPAC/AMPAC. He urged the House members to attend the 20th anniversary KEMPAC banquet and seminar that evening.

David B. Stevens, M.D., Delegate to the AMA, read the following Resolution and moved for its adoption. The motion was seconded and carried.

RESOLUTION

Retirement of Joe D. Miller

WHEREAS, Joe D. Miller from Smith Grove, Kentucky has served the American Medical Association for twenty-six years and recently announced his November 30, 1982, retirement and

WHEREAS, the last office was Deputy Executive Vice President, and

WHEREAS, he has served all physicians and the public well, and

WHEREAS, the Kentucky Medical Association appreciates his service with gratitude, now therefore be it

RESOLVED, that the Delegates of the KMA, on behalf of all Kentuckians, thank Joe D. Miller for his service to our cause.

The meeting was adjourned at 10:55 a.m.

Second Meeting

Speaker Crowder called the second meeting of the House of Delegates to order at 6:05 p.m. and asked Albert H. Joslin, M.D., Owensboro, to give the Invocation. Doctor Marquardt reported a quorum was present.

The Speaker introduced the following Resolution, and a motion was made, seconded, and carried unanimously for its adoption:

RESOLUTION

Subject: Dwight L. Blackburn, M.D.

WHEREAS, the KMA House of Delegates received the news of the sudden illness of our President, Dwight L. Blackburn, M.D., with sadness and concern, now therefore be it

RESOLVED, that the KMA House of Delegates convey to Dwight, his wife, Dot, and their family our sincere best wishes for a full, safe, and speedy recovery.

Doctor Scheen was then called to the podium for announcements and recognition of guests from neighboring state medical associations who had attended the Annual Meeting. Included were H. C. Alexander, M.D., President, Medical Society of Virginia; Harry Shannon, M.D., President, West Virginia State Medical Association; Cyril C. Wiggishoff, M.D., President, Illinois State Medical Association; and John A. Knote, M.D., Vice President, Indiana State Medical Association. A special guest was James H. Sammons, M.D., Executive Vice President of the American Medical Association.

The Speaker briefly explained how items appearing on the Consent Calendar would be handled. Each item on the Calendar would be read individually by the Reference Committee Chairman, and if any

member wished to question or debate any topic, he could ask for the floor and would be recognized. If no question was called, it would be taken by consent that all items appearing on the Consent Calendar would be adopted or filed by the House as indicated.

Unfinished Business

Doctor Crowder recognized R. J. Phillips, M.D., Vice Chairman of the Board of Trustees. Doctor Phillips moved, on behalf of the Board of Trustees, that the name of Harold L. Bushey, M.D., Barbourville, be placed in nomination for election to a four-year-term on the KMA Judicial Council. The motion was seconded from the floor and carried.

Doctor Phillips then introduced another Resolution from the Board of Trustees thanking those organizations and individuals responsible for the success of the 1982 Annual Meeting. A motion was made, seconded, and carried to adopt the Resolution.

• Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REFERENCE COMMITTEE NO. 1

Keith E. Ellis, M.D., Benton
Chairman

Reference Committee No. 1 considered the following Reports:

1. Report of the President
2. Report of the President, Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speaker of the House
5. Report of the Chairman, Board of Trustees
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA
9. Report of the Executive Vice President
10. Report of the Advisory Committee to AKMA
11. Report of the Kentucky Medical Insurance Company Board of Directors
12. Report of the KMA Insurance Agency, Inc., Board of Directors

ITEMS FOR CONSENT

Reference Committee No. 1 reviewed the following items and recommends they be filed as indicated by the consent of the House without discussion.

3. Report of the President-Elect—filed
4. Report of the Speakers of the House—filed
7. Report of the Editor—filed
8. Report of the Delegates to AMA—filed
10. Report of the Advisory Committee to AKMA—filed

Report of the President-Elect

This year has witnessed some dramatic changes both proposed and occurring that confront KMA and all physicians.

The diminution of government resources has produced a restriction on medical programs that has been both helpful and harmful depending on those programs affected. The Federal Health Planning Program has suffered a severe reduction in funds and the health planning agencies are all but terminated. Similar reductions and restrictions have been made in the Medicare and Medicaid programs which have been more detrimental in the sense of direct patient care.

Physician competition, which we have all experienced to some degree, now faces market factors and influences through free-standing clinics and this is an issue that will have far-reaching ramifications as time goes by.

Many other changes have occurred and are still taking place from block grant funding of federally mandated programs to jurisdiction boundaries imposed on the Federal Trade Commission.

As your President-Elect, it has been my pleasure to be involved on your behalf, together with the President, Officers and staff, with these issues. In this position, I've been able to observe your leadership in action and I personally commend them to you for their vigilant and effective efforts. In the year ahead, I pledge myself to continuing these strong efforts and others, and I sincerely appreciate your confidence in electing me.

Dwight L. Blackburn, M.D., President-Elect

Report of the Speakers of the House

Your Speakers appreciate your confidence and support and anticipate a productive session and a strong Associational year.

The strength of the Association, we feel, rests partly on the unity provided by the forum of the House of Delegates meetings. Sincere participation in that forum is a vehicle for the thoughtful and indepth considerations by which adopted policy must be developed. Your Speakers hold that forum in the highest regard.

All the work of the Board of Trustees and committees through the year culminates in the House meetings, and a review of the reports gives an indication of the diligence of those efforts. Close consideration of each item is most necessary.

Little change has been made to the reporting format, and Delegates' material, your Speakers feel, is adequate for instruction purposes. It is appropriate to acknowledge and thank the Rules Committee for its efforts to make our work more streamlined, and we would also draw your attention to the pamphlet that provides instructions on writing Resolutions.

We hope that this has been helpful to you, as has the Rules Committee booklet, and we solicit any comments or suggested changes.

The Delegates' Orientation will again be presented, and we feel that this, too, is a helpful adjunct to the operations of the House.

Your Speakers thank you for the opportunity to serve.

Bennett L. Crowder, II, M.D., Speaker, House of Delegates
Peter C. Campbell, Jr., M.D., Vice Speaker, House of Delegates

Report of the Editor

As Editor of the *Journal of KMA* I am proud to report on the past year of publication. As always, our goal is to provide a forum for the exchange of scientific information and ideas through the use of scientific articles written by Kentucky physicians.

The *Journal* strives to continue to serve member needs by learning their views. To accomplish this, a readership survey card was inserted randomly into the February, May and August issues of the *Journal*. From the results, which will be published later in the year, we hope to include more special features and articles designed to assist physicians in their practices.

It is especially rewarding to note that this year there has been a substantial increase in the number of manuscripts submitted for the editors' consideration. These papers have been of such excellent caliber, that to accommodate them, the scientific section of the *Journal* has been expanded. The quality of these papers reflects highly on the abilities of Kentucky physicians who have contributed their time and effort.

I think it is noteworthy to mention that the *Journal* has received the respect of others outside of the KMA membership. The *AMA News* has reprinted three *Journal* editorials during the past year, along with the *Journal of the Indiana State Medical Association*. Reprint orders for the scientific articles are numerous and come from countries as far away as Romania and Czechoslovakia. Finally, the amount of national advertising revenue, used to offset the cost of printing the *Journal,* has doubled during the past year.

As an official publication of the KMA, the *Journal* has an obligation to provide membership services. In the July issue of the *Journal* a roster of all KMA members was published for the first time. We hope it will serve as a reference for contact purposes and a central list of KMA members in good standing. If response to this is favorable we hope to make it a regular yearly feature providing additional statistical information on KMA members.

The *Journal* also relies on contributions from the University of Kentucky's College of Medicine and the University of Louisville's School of Medicine for the "Grand Rounds" section, and for the articles for the Continuing Medical Education section submitted by the specialty societies.

The *Journal of KMA* attempts to offer every member an opportunity to participate. Please use the "Letters to the Editor" section to let us know your views.

It is my honor to work with a dedicted Editorial Board and I would like to take this opportunity to thank each of them for their contributions.

A. Evan Overstreet, M.D., Editor

Report of the Delegates to AMA

The KMA Delegation to the American Medical Association House of Delegates attended two meetings during the last Associational year. Delegates David Stevens, Lexington; Fred Rainey, Elizabethtown; and Harold Haller, Louisville; with Alternate Delegates Lee Hess, Florence; Ken Crawford, Louisville and Wally Montgomery, Paducah; were in attendance at the December 6-9, 1981, 35th Interim Meeting in Las Vegas, Nevada.

At this meeting, no significant action was taken which affected individual members. Essentials for accreditation of sponsors of continuing medical education were adopted. The House also voted to maintain its policy of granting Delegates to national medical specialty societies when properly credentialed. At this meeting, the candidacy of Fred Rainey for the AMA Board of Trustees was initiated. Also, on recommendation of the Board of Trustees, the House of Delegates adopted the budget for fiscal year 1982 with anticipated revenues of $83,000,000 and expenses of $79,000,000. The American Medical Association's financial status is now secure with adequate reserves and good investments.

The American Medical Association formally opened its Washington Headquarters, a new building constructed and owned by the AMA. This building contains the AMA Washington Headquarters, but also

has rental space which has been adequately subscribed. In addition, the AMA has made significant investments in real estate on the near north side of Chicago in the last few years, anticipating a successful investment program in this area.

The Annual Meeting of the House of Delegates of the AMA was held in Chicago, Illinois at the Marriott Hotel, June 13-17, 1982. In attendance besides the Delegates above, were KMA President Ballard Cassady, Board Chairman Richard Hench and Trustee Donald Barton. In addition, Student Delegates from the University of Kentucky and University of Louisville were present and participated in the deliberation of the delegation.

Significant actions by the House of Delegates included:

The endorsement of the previously planned increase in dues of $30, bringing dues for regular members to $315. This included reduction for new physicians and, of course, the continued dues of $45 for residents and $15 for students.

The House endorsed a mechanism to establish a new section in the AMA House for representation of medical staff. This new section will focus attention on the problems physicians have with hospitals and provide a mechanism to consider these issues and provide for appropriate AMA action.

A National Health Policy introduced by the Board of Trustees was endorsed by the House. The concept embodies the development of a national coalition of various constituencies in the United States to develop a National Health Policy for long-range planning by the public and private sector. Charter date for achievement of this policy is 1984.

A proposal was endorsed to revive the general internship as the first post-graduate year following medical school graduation. Several years ago the internship was abolished and incorporated into the formal post-graduate residency program. Because of dissatisfaction with the limited clinical training of residents in general medicine, this concept was revived and the Council on Medical Education was authorized to work among the various medical education groups to achieve this goal.

Elections of senior AMA officers were a surprise. Our candidate for the AMA Board of Trustees, Fred Rainey, ran a spirited campaign, but did not win.

There were two candidates for AMA President—former Chairman of the AMA Board from Indiana, Lowell Steen, and AMA Trustee Frank Jirka, a urologist from Berwyn, Illinois. In an upset, Doctor Jirka won the Presidency. Concurrent with this, Doctor John Coury of Michigan and Doctor Hugh Ritter were reelected to the Board. Elected for the first time were Rufus Broadaway of Florida and Bill Dowda of Atlanta, Georgia. There were nine candidates in the election and the results, both for President and the Board of Trustees, were surprising. Many interpreted this as a rejection of the current AMA leadership at the Board of Trustees and staff level. However, at the Board of Trustees organizational meeting following the Annual Meeting, the previous officers were reelected, affirming at the Board level the past leadership. These officers include Joseph F. Boyle of Los Angeles as Chairman; William Hotchkiss of Norfolk, Virginia as Secretary-Treasurer; with the Executive Committee completed by Doctors Bill Rial, current President; Frank Jirka, President-Elect; John Coury; Max Cole, who was recently announced for President and Hugh Ritter. Of regional interest, John E. Albers, of Cincinnati was elected to the Council on Medical Education.

The major problem that I see in the AMA is the failure to attract an adequate percentage of the physician population as members. The KMA is carrying on a membership drive at this time on a one-to-one basis through its Membership Committee, Chaired by Harold Haller. The results of this effort have yet to be determined.

This report would not be complete without acknowledging the expert and superior staff of the KMA. Compared to other states, we have an excellent staff who carry out their assignments faithfully, reliably and cheerfully. Without the help of Bob Cox, Bill Applegate, Bob Klinglesmith and Don Chasteen the delegation could not function. At this meeting, also, the Auxiliary helped by hosting the special party we had for Fred Rainey. Also participating were the Student Delegates and our friends in allied health organizations, particularly Doug Sutherland and the Blue Cross and Blue Shield staff. My thanks also is extended to the other members of the delegation who have faithfully served and carried out whatever assignment given without complaint.

David B. Stevens, M.D.,
Senior Delegate to the AMA

Report of Advisory Committee to AKMA

The Advisory Committee to the Auxiliary of the KMA is composed of the President and the two Immediate Past Presidents of the KMA. The purpose of this Committee is to provide assistance and liaison to the Auxiliary and to make recommendations to the Board of Trustees regarding Auxiliary activities. Each year the Committee reviews proposed programs as presented by the President of the Auxiliary.

The Committee continues to be impressed by the strong programming instituted by the Auxiliary which

contributes immensely to the communities of our state. We wish to congratulate Mrs. John (Joyce) Noonan, of Paducah, for an outstanding year and for her outstanding commitment to the goals and projects completed during the past year. We call your attention to Mrs. Noonan's Final Report and urge members to review the activities of the Auxiliary during the 1981-82 year.

Briefly, the Auxiliary exceeded all previous records in raising funds for the AMA-ERF Fund. The Auxiliary continues to be the largest donor of funds and gifts to the Ephraim McDowell House in Danville, which is owned and operated by the KMA. During the past year the Auxiliary worked diligently with various groups in seeking legislation to require child seat restraints. Additionally, they are attempting to increase membership and reestablish Auxiliary Societies in various communities and counties.

On behalf of the Committee we wish to express our appreciation to the Auxiliary and to the KMA for the opportunity to be of service.

Frank R. Pitzer, M.D., Chairman

End of Consent Calendar Items

Report of the President

Summarizing a year's activities is always a difficult task, especially for an Association that maintains a large membership and an active agenda. All of us can be extremely proud of the KMA and the role it plays in the delivery of health care in Kentucky. We continue to maintain considerable influence and respect and utilize the input we have in a very effective and businesslike manner.

While we continue to parry and thrust with government at all levels, some positive results and accomplishments have been made. The 1982 General Assembly overshadowed most activities and required considerable time and effort. Carl Cooper, Jr., M.D., State Legislative Chairman, directed our overall effort and, along with 138 physicians out in the state serving as Key Men, pulled KMA through a remarkable session. Various regulatory proposals were considered during the year, and KMA was able to substantially alter original proposals, yet assist State Government in reducing overall costs. We have enjoyed tremendous support from specialty groups during the year, and this has been extremely helpful in solving our mutual problems.

KMA's dues level, the same for the last seven years, has been adequate to meet our needs, primarily due to excellent planning and investment. While the work load of the Board of Trustees and staff has increased dramatically over the years, staff levels are virtually the same as 1974. In addition, Officers of the Association have become much more involved, and this has required that they spend a good deal of time away from their private practice. Nevertheless, it appears that we will continue into the eighth year at the present dues level, a remarkable feat when you consider the ravaging inflation rate over the past seven years. However, this cannot go on forever, and in the near future we will have to consider making changes which will insure our continued growth and financial strength.

As you scan the long list of reports made annually to the House of Delegates, it should give each of you a strong sense of pride in the work going on at KMA. Approximately 40-50% of our committee structure is devoted to public and patient needs. This has allowed the Association to maintain a strong public posture, and it is vitally important that we continue to provide such forums for the airing of grievances and resolution of differences which arise.

It is in this area that I perceive dramatic and fundamental changes as they relate to organized medicine. According to most prognosticators, we can expect a large influx of new physicians during the 1980's. While it is too early to predict the impact of this phenomenon, we are beginning to see both positive and negative implications. On the positive side, greater access to care is evident, and the choices available to patients seeking physicians is broader in scope. Continuing education is now perceived as an opportunity, almost a necessity, rather than a drudgery. Additionally, as time goes on, physicians will be able to live more normal family and social lives, an ability heretofore denied many practitioners due to large patient loads. Finally, with increased competition, physicians are much more concerned with their professional and personal images and strive to more effectively communicate with their patients and the public.

We'll see changes in other areas, too. The larger physician population will greatly expand the work load of committees devoted to reviewing grievances and insuring professionalism within our membership. The Judicial Council, Claims and Utilization Review Committee, and the Committee on Impaired Physicians will see their work loads increased substantially, the result not only of the growing physician population, but also a more knowledgeable public. Only through continued perseverance and an activist approach in seeking out those physicians who betray the public trust and the integrity of the profession can these committees maintain the honor of the profession. On the other hand, these same committees must also have the enthusiastic support of the membership, the House of Delegates and the

Board of Trustees if we are to retain such review mechanisms within the profession. We cannot ignore increasing government and consumer scrutiny, and more militant groups will soon seek, through political processes, to wrest control and responsibility from the medical community.

The impact of the expected wave of new physicians won't just be seen externally. Internal changes will also be ushered in, centered primarily on the mechanisms used to deliver medical care. Shock waves may spread throughout the profession and create considerable turmoil between traditional practitioners and those opting for hospital controlled practices, HMO's, IPA's and the 12-18 hour clinics now appearing across the nation.

The Board of Trustees has begun to respond to these new innovations, but its deliberations have been tempered by an abundance of caution. Attempts to restrict or limit medical practice and its delivery patterns through legislation or regulation could place every physician's office under government control. On the other hand, some might perceive such activity as a maneuver to tightly control the profession and reduce alternatives to medical care. Regardless, we must avoid the creation of any split in our ranks that would severely hinder future opportunities to resolve differences. Therefore, we must continue to address these problems and strive to preserve the unity so necessary to sustain organized medicine and its future.

Despite short term differences, organized medicine will survive and be stronger as a result of future innovations. The initial glow of contentment enjoyed by government and consumer groups with regard to the "entrepreneurs" and their chain-store approach to medicine will wane as all parties involved come to the realization that a long term physician/patient relationship is not possible in this type of environment.

In the long term, organized medicine, and particularly the KMA, will continue to signify strict adherence to high standards and quality medical care, open to scrutiny and mindful of public concerns. Our image will be enhanced as a result of these transitions and membership will denote excellence and professionalism.

I would be remiss if I did not express my sincere appreciation to our staff. I do not believe there is any way the membership of this organization can appreciate the expertise of our staff, unless they have served as Officers of KMA. The sincere interest and concern that they hold for our problems is unequaled in any other state organization with which I have been in contact. Our budgeting success has been due to Bob Cox's careful administration of our funds, and I recognize that although each of our staff has their own special talents, they have been organized into a most expert team under the leadership of Mr. Cox, who has completed his 20th year with KMA this year.

In closing, let me thank each of you for your support and indulgence. The high personal privilege and honor of serving this Association has been the highlight of my career. While this report brings to a culmination my term as President, I shall continue to be available to serve wherever my experience and knowledge can be utilized.

Ballard W. Cassady, M.D., President

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the President and thanks and congratulates Doctor Cassady for his efforts and time well spent in his duties. The Committee especially commends Doctor Cassady for his work in the areas of 1982 legislative activities and his attention to proposed innovations in health care delivery. The Committee recommends that this report be filed.

Report of the President, Auxiliary

The Auxiliary to the Kentucky Medical Association's sunburst of energy and enthusiasm was gained from this year's theme "SERVICE IS OUR SUNSHINE." Serving the needs of others truly lights up our life. It has been most inspiring to witness the true Auxiliary Spirit in action, as Auxilians continue to share special talents and time to brighten the lives of others. It is indeed a privilege to share highlights of this year's endeavors of the State Auxiliary.

This year the state organization was composed of 28 organized auxiliaries. Our membership shines at a total of 1444, this includes 26 Members-At-Large, and 40 Resident Physician Medical Student Spouses. Two MAL's served on the State Board this year. Yes we do value the membership and input of our MAL's. We were delighted to have a Resident Physician Spouse group organize in Hopkins County this year with 16 members. Our other groups are in Fayette and Jefferson. The members in these counties support the activities of the RPM/S Spouses by opening their homes for the groups' meetings, and provide programs when requested. They are invited to participate in the county auxiliary activities. Statewide support is shown through the Sponsor A Spouse program, where auxilians sponsor memberships to State and National, in an effort to light their way in Auxiliary.

In June 1981, AKMA was represented at the KMA's Legislation Day in Washington by our President-elect Ellen Sklar, and Legislation Chairman Phyllis Cronin. They attended the briefing from the AMA lobbyists on pending medical legislation, and visited their legislators.

It has been a most rewarding experience to represent AKMA at two AMAA Conventions as president-elect and president. The opportunity to attend reference committee hearings, and to serve as delegates give us a voice in forming and planning the future of our organization. We were honored to have Oneida Betts serve on the National Board this past year as Resident Medical Student Spouse Southern Region Representative, and was installed as a Director of Southern Region for 1982-83. We are indebted to Oneida for her dedication and interest in Auxiliary.

In July, our Legislation Chairman Phyllis Cronin, several other members and myself attended the Public Hearing in Frankfort for the Child Passenger Safety Bill, and presented a statement in support of this Bill. Physicians and other interested organizations presented their support of this Bill.

A full day of sunshine was enjoyed in August by all who attended Leadership Conference in Elizabethtown. Doctor Clifford Kuhn, the keynote speaker, shared ways of coping with Stress, and led us in a 10 minute relaxation exercise and encouraged all to practice this daily, and have our spouses do the same! The emphasis in our Shape Up for Life campaign this year is Mental Health and Stress. State Senator Helen Garrett also addressed the group on the Child Passenger Safety Bill. The Vice Presidents and other state chairmen presented workshops in Membership, AMA-ERF, Health Projects, and Legislation in addition to their exhibits with handout material to aid County Auxiliaries with their programs for the year.

The first edition of our State Cookbook made its debut at the August Conference. The cookbook entitled "ON CALL" is full of many Auxilians' favorite recipes that are sure to be a delight. Thanks to the special efforts of Sylvia Davis and her Cookbook Committee, also those who assisted in promoting, collecting and compiling recipes, and to all who contributed special recipes this cookbook was made possible. Because of the support of the membership, the Physicians, and other interested persons by purchasing the cookbooks the printing cost is paid in full within a six month period! All proceeds from the sale of the cookbook will now go into our Continuing Health Education Fund.

The Fall Board Meeting was held at the Ramada Inn in conjunction with the KMA's Annual Meeting. Our special guests included Doctor Ballard Cassady, KMA President; Mrs. Gordon Betts, AMAA Chairman RPM/SS; and Mr. Barry Gottschalk with the State School Health Committee. Due to the efforts of Barbara Cox and JoHelen Cloys CME Credits were secured for Physicians and Nurses by taking the CPR Course. A Shape Up For Life Jog was held. The Auxiliary assisted the KMA's Impaired Physician Committee in their booth. A delightful Luncheon and Style Show was hosted by Jefferson County. The State Quilt was won by Mrs. Hatcher from Pike County. Over $3,000.00 was made for AMA-ERF with the Quilt.

In support of AKMA's, KMA's, and other interested organizations efforts to increase awareness for Child Passenger Safety, Governor Brown proclaimed the week of October 24-31 as Child Passenger Safety Week in Kentucky.

AMAA Leadership Confluence was held in Chicago in October. Ellen Sklar, one County President, two County Presidents-elect, and myself attended. Excellent program material is presented at these meetings. Information gained at this meeting is shared in the Bluegrass News, and President's Newsletter.

Legislation Day was held in February at the State Capitol. A coffee for the Legislators was held in the State Reception Room. Following the coffee, Mr. Bill Doll, Director, Legislative and Government Affairs at KMA briefed the Auxiliary on pending Legislation concerning medicine. Lunch in the Capitol cafeteria provided members the opportunity to meet with their legislators. Our members were introduced by their legislators during the session in the House and Senate. Our Legislation Chairman met with the KMA Legislation Committee at their regularly scheduled meetings throughout the year. This involvement kept the Auxiliary well informed. Involvement Does Tip The Scales! Due to the efforts of the KMA, AKMA, and many interested persons the Child Passenger Safety Bill did pass this session. Even though it was weakened when the penalties were dropped, it will serve as an educational tool.

The Regional Cluster meeting was held in February in Chicago. Ellen Sklar, and Mary Veurink attended this meeting designed to prepare State Presidents-elect and President-elect nominees for the coming year, and to become familiar with reference committee information and other business to be presented to the House of Delegates at the Annual Convention.

Our line of communication was kept open with my monthly newsletters sent to all Board members, and County Presidents. The MAL members were sent information about all State Meetings, inviting them to attend. Four issues of the Bluegrass News were sent to every member, and one complimentary issue to all potential MAL's in June.

Our AMA-ERF sun shines with brilliance, the total reached this year was $33,375.08. The Christmas Sharing Card raised $18,000.00 of this amount, Holiday Auctions, raffles and other projects raised the remainder. Our State Chairman of AMA-ERF Dorothy Rush will present the checks to the Medical School Deans during the KMA House of Delegates session. This year's State Project is a beautiful State Wild Flower-Linen and Lace Tablecloth. Each square was embroidered by the counties, and assembled by our very talented State Chairman. The winner of the Tablecloth will be announced at the Fall Board Meeting in September.

Our County Auxiliaries were involved in various Health Projects this year that met special needs in their communities. They included awareness programs for Mental Health and Stress, Nutrition, Exercise, CPR—many Auxilians are certified and are instructors in CPR, Child and Spouse Abuse, Immunization, Safety on Streets, Health Fairs, Pediatric Orientation, Organ Donor, Blood Banks, Drug and Alcohol Awareness, various Screening Programs. There has been a statewide effort for Child Passenger Safety—support of the Bill, educational and Loan A Seat Programs. Also much interest and support of Comprehensive Health Education Plan for all schools—this year counties cooperated by completing a questionnaire to help evaluate the needs statewide in this area—also the State Auxiliary provided guidelines to help the counties form School Health Committees in their communities.

The Auxiliary observed National Organ Donation Week April 25-31. In order to create for the citizens of this state an awareness of both the need for, and the opportunity to give the gift of life and of living through organ donation Governor Brown proclaimed this week in Kentucky as The First Annual Organ Donation Week, in support of AKMA's efforts in this endeavor.

The Health Careers Loan Fund receives $1.00 from each Auxiliary member's annual dues. A total of $3,000.00 was given in new loans during 1981 to three students. Eleven students are currently repaying loans. Five students are enrolled in nursing and radiology programs.

We are all very proud of McDowell House and continue working to preserve the beauty and history this House beholds. AKMA had a state project this year to benefit, and create more interest statewide for McDowell House. A beautiful DOLL HOUSE was made by Doctor Frank Crawford from McCracken County, he donated his labor, and McCracken County donated the materials plus completely furnished the DOLL HOUSE. Each County received credit for the number of opportunities sold. Mrs. Allen from Pike County was the proud winner of this House. A total of $1,161.00 was raised for McDowell House. Twelve of our counties raised over $4,000.00 for McDowell House with various fund raisers, and many contributed to the Friends Program. Anyone can be a Friend of McDowell House, the Friends Program raised $13,400.00 this past year. "Well Done, Friends!"

We had a most exciting Convention this year at Kentucky Dam Village State Park. Our special guest was Mrs. Harry S. Dvorsky, AMAA President. The luncheon was held aboard the Belle of the Lakes. A Special Achievement Award was presented during Convention to Dorothy Hollis, R.N., a Boyd County Auxilian, for sharing her sunshine as author of the booklet entitled "Self-Examination After Breast-Cancer Surgery." Through her efforts a special contribution was made to patient education, and the continuing health education of breast cancer patients. This booklet is used by physicians and hospitals throughout the U.S. After the business meeting the Jefferson County Auxiliary Drama Group performed their "Medical Follies and Foibles" as they sang, danced, joked, and highlighted the different medical specialties, needless to say they kept us in stitches! After the installation dinner, Doctor and Mrs. Luke Ross entertained us with a "Ballroom Dance Exhibition." After convention Mrs. Dvorsky made an on-site visit to Hopkins County Auxiliary. A reception was held in her honor as well as Doctor Ballard Cassady who visited the medical society at this time.

During my year as President-elect and President, I visited 21 of our 28 counties, and attended two area meetings. The most exciting experience this year and last was the opportunity to make friends with all our members as I traveled around Kentucky.

It was an honor to represent the Auxiliary at one of the KMA District Meetings and speak about our programs. I have also been invited to all Board of Trustee meetings, and have attended all but one. I did appreciate the time given the Auxiliary President to speak about our activities and needs. We are most indebted to the KMA for your continued support.

The memories this year holds for me will be my treasure for life. We hope that through our efforts and involvement in Auxiliary we have lessened the physicians' burden of service to others, and have contributed to improve the health and quality of life for all! Auxilians true spirit of service will continue to shine, you see, because the sun never sets in Auxiliary!

Mrs. John D. Noonan (Joyce), President

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the President, Auxiliary to KMA. Thanks are offered to the President for the varied activities so well undertaken by this truly dedicated group. The Committee particularly congratulates the Auxiliary for its success in fund raising for AMA-ERF. The Committee recommends this report be filed.

Report of the Chairman, Board of Trustees

I consider it quite an honor to report to you as Chairman of your Board of Trustees this past associational year. I have seen our KMA at work firsthand and I have been thoroughly pleased and impressed. In my judgment, every physician should be proud of his or her membership in KMA, and if each Kentucky physician could have shared my seat this past year, I do not think there would be a voluntary nonmember in our state.

My appreciation is fully extended to the members of the Board who are truly unsung heroes giving of their time, knowledge and energy. I also express gratitude for the commitment of the officers who must be "on call" continuously for the Association, for the dedication of an ever-increasing number of physicians serving on our committees, for members who accept special assignments, and certainly for the members of the House of Delegates who must weigh the issues in an abundance of material and reports to set our policy.

KMA has proven its soundness in the past and has represented our profession since 1851. A stronger point to me, perhaps, has been envisioning our future. Whether in the field of office practice, education, representation or services of day-to-day economic value, the Association continues to expand and grow to serve our needs.

Perhaps the greatest reason for my optimism regarding KMA's future is the KMA staff under Executive Vice President, Robert G. Cox. They have made the mistake of being so competent and so reliable that their excellence is now taken for granted, and is assumed and expected. Let me just say it is the finest staff I have ever worked with or been associated with.

Government activities, both in Washington and Frankfort, demand increasing representation, information and persuasion. There is no "winner take all" game and negotiations at a professional level are an everyday way of life. While each physician may not agree with every decision, the ongoing representation of your Association by leadership and staff gives a great deal of confidence to your Board Chairman.

Elsewhere in your reports, you will read of the extremely successful operation of the Kentucky Medical Insurance Company, now Kentucky's largest professional liability insurance underwriter for physicians, and the KMA Insurance Agency, Inc. The construction of a building addition is underway and is adressed elsewhere in this report.

INCREASED KMA ACTIVITIES

KMA is striving to plan for physicians' needs and to create professionally sound services for those needs in the most economical way possible. To expand KMA's capability of offering increased services to the membership, the Executive Committee and Board of Trustees have studied the concept and investigated the development of a holding company, the title of which could be KMA Services, Incorporated.

The holding company would be a wholly owned subsidiary of KMA and would, in turn, own other companies such as the now existing KMA Insurance Agency.

The services of these other companies owned by the holding company are not fully defined at this time, but would be developed and put into operation in an orderly fashion as needs arose. One example might be the provision of a statewide leasing plan to KMA members for automobiles, recreational vehicles, office equipment, *etc.*, at very attractive rates.

There are many services utilized by physicians which could be studied. The primary goal in establishing any company to offer services would be an existing need, so that the services provided will be a definite benefit of KMA membership. Any service of this nature would be offered in a professional manner so as to provide the best in quality at a cost as low as possible.

Since the creation of the holding company could not jeopardize KMA's status as a professional organization and would be an inexpensive mechanism to provide new benefits and services to the membership, the Board of Trustees urges the House of Delegates' authorization of the company.

The Board of Trustees has also suggested investigating the feasibility of establishing a financial institution which would be available only to KMA members, their families and other associated entities such as county medical societies and professional service corporations, which could have a title such as the KMA Financial Institute. Such an institution could be chartered under federal credit union laws, which would have several attractive qualities and could provide most services offered by any financial institution. The KMA Board of Trustees recom-

mended that the Agency Board spend up to $5,000 in investigating the details of this concept.

Using this concept, direct fiscal assistance could be offered to the membership in all aspects of professional and private dealings from starting-up-practice loans through retirement programs, and including business loans, financial planning, investment opportunities, and so forth. Because the concept would be based on physican ownership and control, it is anticipated that services would be provided at interest and dividend rates better than current market rates. The Board of Trustees urges further study of this possibility and implementation by the Board, if and when appropriate.

It has been an extremely busy year, not to mention the 1982 Kentucky General Assembly and the outstanding job performed by Carl Cooper, M.D., Chairman for State Legislative Activities, and the staff members, who spent some three and one-half months in Frankfort. There have also been some disappointments as our candidate for the AMA Board of Trustees, Doctor Fred Rainey, was not elected. With two incumbents and two new Trustees to be elected in a nine person race, we knew our work was cut out for us, as this was his first outing. There's no question in one's mind that we had the best candidate and, hopefully, he will make himself available again. If so, I feel confident he will prevail.

The "Summary of Board Meetings" will hopefully provide some indication of issues addressed by your Board of Trustees this year. Copies of the complete Minutes of both the Executive Committee and Board of Trustees are being provided to the Chairman of Reference Committee No. 1.

The Chairman of the Board reports annually on the status of the Legal Trust Fund. During the current Associational year, expenditures of $2,325.66 have been authorized. The current balance is $61,398.42.

SUMMARY OF BOARD MEETINGS

First Meeting, September 24, 1981

Acting as Temporary Chairman, KMA Secretary-Treasurer S. Randolph Scheen, M.D., introduced the newly elected members of the Board of Trustees and the new officers: Dwight L. Blackburn, M.D., Berea, President-Elect; Sam D. Weakley, M.D., Louisville, Vice President; Bob M. DeWeese, M.D., Louisville, Trustee, Fifth District; Nelson B. Rue, M.D., Bowling Green, Trustee, Sixth District; and Don E. Cloys, M.D., Richmond, Trustee, Eleventh District.

The Board then elected the Executive Committee members to serve with the President, President-Elect, Vice President, and Secretary-Treasurer for the 1981-82 Associational year. Richard F. Hench, M.D., Lexington, was appointed Chairman of the Board, and R. J. Phillips, M.D., Owensboro, was named Vice Chairman.

Donald C. Barton, M.D., Corbin, and Robert E. Smith, M.D., Covington, were also named to the Executive Committee as Trustees-at-Large

Mrs. Paul Lett, Ashland, was elected to the KEMPAC Board as an Auxiliary Member-at-Large.

The Board reviewed the Executive Committee's recommendations for committee personnel, made appropriate changes and additions, and then approved the committee membership for the 1981-82 Associational year.

The decision to hold the 1982 Annual Meeting at the Hyatt Regency Hotel in Lexington was reaffirmed.

The Board of the KMA Insurance Agency, Inc. was reorganized on a smaller scale, and the following were appointed to the Board: Dwight L. Blackburn, M.D., Berea; Ballard W. Cassady, M.D., Pikeville; Richard F. Hench, M.D., Lexington; S. Randolph Scheen, M.D., Louisville; Robert G. Cox, Louisville; Carl L. Wedekind, Jr., Louisville; and Morton C. Bell, Louisville. It was decided the Agency Board would elect its own officers.

Second Meeting, December 16-17, 1981

The KMA Board of Trustees met in regular session at the KMA Headquarters Office on December 16-17, 1981. Reports were made by the President, Secretary-Treasurer, Senior Delegate to the AMA, President of Auxiliary to KMA, Secretary of the State Board of Medical Licensure, and Secretary of the Department for Human Resources.

Highlights of Board action taken at the meeting include:

- Appointment of a Coordinating Commission on Peer Review to study the adequacy of peer review activities in the state in the absence of PSRO.
- Referral of Department for Human Resources proposed changes to the School Health Code to the Committee on School Health for study.
- Authorization for the Quick Action Committee to submit a Resolution in opposition to the proposed Blood Resource Sharing Act which would move blood through the country on an as-needed basis.
- Referral of guidelines developed by the Jefferson County Medical Society in response to the proliferation of "emergicenters" in the area to the KMA Emergency Medical Care Committee for review.
- Nomination of physicians to serve on several Governor appointed councils and committees.
- Approval of a report from the Committee on State Legislative Activities outlining legislation of interest to the Association.

• Appointment of a committee to investigate a situation in Christian County where some physicians have proposed withdrawal from the Pennyrile Multi-County Medical Society, and reformation of the Christian County Medical Society.

The Board members heard reports on the Kentucky Medical Insurance Company and KMA Insurance Agency, Inc., and it was reported both the Company and Agency have repaid all loans made to them by KMA.

It was also reported that plans are progressing for the addition to the KMA Headquarters Building.

Mr. Thomas D. Stroud, Vice President of Kentucky Blue Cross and Blue Shield, presented rate renewal information for the KMA-endorsed Blue Cross/Blue Shield/Major Medical group plan for KMA members. Due to increased utilization by KMA members and substantial premium increases proposed, the Board voted to make changes in the present agreement by eliminating the current low option coverage, maintaining the high option coverage, and adding a comprehensive major medical program with a $300 deductible.

In other action, the Board passed a Resolution endorsing the Jefferson County Medical Society's project to restore the old medical school in downtown Louisville; asked the Bylaws Committee to propose a change that would conform KMA Bylaws to those of the AMA in regard to Life Membership; and made a recommendation to the Committee on Maternal and Child Health concerning funding of neonatal care in Kentucky.

The Board authorized a voluntary assessment for contributions to Fred Rainey for AMA Trustee Campaign Fund; and appointed William B. Monnig, M.D., Erlanger, to fill an unexpired term of Thomas L. Heavern, Jr., M.D., Highland Heights, as a regional editor on the Editorial Board of the *Journal*.

Third Meeting, April 7-8, 1982

The KMA Board of Trustees met in regular session at the KMA Headquarters Building on April 7-8, 1982.

Reports on activities were presented by the President; Secretary-Treasurer; Secretary, State Board of Medical Licensure; Senior Delegate to AMA; KPRO President; and Auxiliary President. Carl Cooper, Jr., M.D., Chairman of the Committee on State Legislative Activities, reported on the recently completed 1982 Kentucky General Assembly.

David T. Allen, M.D., Commissioner, Bureau for Health Services, reported a serious shortfall was anticipated in the Medicaid Budget, and noted KMA's request for public hearings on two sets of regulations promulgated by the Department regarding eyecare for newborns and mandatory out-patient surgery.

The Board took action to approve the Budget for the 1982-83 fiscal year; to give flexibility to the Executive Committee to obtain industrial revenue bonds to finance the addition to the KMA Headquaters Building; and to decline a request to issue a charter to establish a separate Christian County Medical Society, following results of a poll.

The Board endorsed the establishment by the Voluntary Effort of local health care coalitions, and also endorsed the JCAH standards for the operation of emergency rooms while continuing to study guidelines drafted by the Emergency Medical Care Committee.

The Board agreed with the Committee on School Health's recommendation that only physicians be allowed, by virtue of the School Health Code, to perform examinations on pre-school children; and supported the Committee in its efforts to work with the Department for Human Resources in locating physicians to conduct the exams. In related action, the Board appointed two representatives to serve with members of the Kentucky Academy of Family Physicians and the Kentucky Chapter, American Academy of Pediatrics on an advisory committee to the Department of Education on matters concerning the health of Kentucky's children.

The Board was informed the Department of Human Resources had agreed to continue mandatory tuberculosis testing of school children, but to leave examinations of school personnel to local health department discretion based on TB incidence.

Nominations were made to the KMIC Board of Directors, the Rural Kentucky Medical Scholarship Fund Board of Directors, and for three Governor-appointed Councils. Permission was given to expand the Placement Services Office to include information for communities and physicians seeking part-time medical assistance.

The KMA Insurance Agency, Inc. was authorized to offer additional insurance products to Kentucky physicians and to position a full-time PICO staff person in the Agency Office to help in this endeavor.

Fourth Meeting, August 11-12, 1982

The KMA Board of Trustees met in regular session on Wednesday and Thursday, August 11-12, at the KMA Headquarters Office in Louisville. A primary purpose of the August meeting is to review the reports of the committees to be presented to the House of Delegates.

The Board accepted reports of the President; Secretary-Treasurer; Secretary, Board of Medical Licensure; Auxiliary President; KPRO President; Delegate to the AMA; and representative of the Department for Human Resources.

The Board expressed appreciation to Frank M. Gaines, M.D., Secretary of the Board of Medical Licensure, and directed that a letter of support be written to the Licensure Board President commending the Board's recent activities and hiring of additional investigators.

The Board suggested nominees for appointment to the UK Tobacco and Research Board; appointed an Associate Editor to the *Journal* Editorial Board; and named a new KEMPAC Director.

The name of Thomas L. Heavern, Jr., M.D., Highland Heights, was submitted to the AMA for consideration of the AMA's Special Award in Recognition of the Year of the Disabled.

The Board members expressed deep concern and reservation about the CITICARE Program being proposed for the indigent in Jefferson County and offered its assistance to the Jefferson County Medical Society should opposition to the plan be indicated.

Staff was directed to review the Association's current policy on midwifery; and to meet with President-Elect Blackburn to finalize plans for the 1983 KMA Leadership Conference.

Payment from the Legal Trust Fund of a legal fee incurred in Fayette County in a peer review suit was authorized, and the Board recommended to the KMA Insurance Agency, Inc. Board of Directors that it proceed with plans for the 10,000 square foot addition to the Headquarters Building.

The Board also recommended to the Agency Board that it spend up to $5,000 to investigate the establishment of a KMA Physician Financial Institute to provide financial services to physicians. Within the same concept, the Board endorsed the formation of a holding company to investigate setting up additional companies (automobile leasing, computer services, etc.) to serve KMA members, and asked for approval by the House of Delegates.

The Board members passed a special Resolution in recognition of 20 years of service to the Association by its Executive Vice President, Robert G. Cox.

The next meeting of the Board will be held in conjunction with the 1982 Annual Meeting in Lexington.

EXECUTIVE COMMITTEE

The Executive Committee conducts the Association's business on a day-to-day basis and acts for the Board of Trustees between sessions of the Board. It consists of four Trustees (including the Board Chairman and Vice Chairman) elected by the Board, along with the President, President-Elect, Vice President, and Secretary-Treasurer.

The Executive Committee has met five times this year on matters requiring immediate attention or to maintain close liaison with allied groups, governmental officials and with the Association's committees which meet often to take action and seek guidance on a timely basis.

The Quick Action Committee, composed of the President, President-Elect, Chairman of the Board, and Secretary-Treasurer, is "on call" and frequently meets by telephone as well as in quickly scheduled on-site meetings to make "on-the-spot" decisions when necessary. Normally, the Quick Action Committee will meet eight or 10 times during the year, and during legislative years such as we just completed, routinely meets on Wednesday evenings throughout the session.

Ad Hoc Committees

The Board's three Ad Hoc Committees this year were Ad Hoc Committee on Medicaid; Ad Hoc Committee on the Headquarters Building and Ad Hoc Committee to Study Regional Boards of Health. They each performed a specific task for the Board and have served the Board faithfully.

Special attention is warranted in this report to the Ad Hoc Committee on the Headquarters Building. We have now passed the studying phase for an addition to the Headquarters Building. Plans should be complete by the time this report is distributed and construction may well be underway. As agreed upon by the House of Delegates last year, land is being made available to the KMA Insurance Agency which will finance the construction of the 10,000 square foot addition to our Headquarters Office. The two-floor addition will house KMA staff on the first floor and the Agency and Insurance Company staff will occupy the second floor. It is anticipated that the building addition will be occupied before the 1983 KMA Annual Meeting.

Richard F. Hench, M.D., Chairman

RECOMMENDATIONS:

1. The Board of Trustees recommends that the House of Delegates authorize the Board to establish and operate a holding company to be a wholly-owned subsidiary of the Kentucky Medical Association and to develop and expand its involvement in services of benefit to the membership, as appropriate. Fiscal Note: $500.
2. The Board of Trustees recommends that the House of Delegates authorize the Board to continue to study the feasibility of establishing a financial institution for members of KMA, their families, employees and other associated entities. If the feasibility study produces a positive indication, it is recommended that the Board be empowered to implement operations, as appropriate.

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Chairman, Board of Trustees. The Chairman and the Board are to be commended again for their time and efforts in conducting the business of the Association. After an informative discussion, the Committee is particularly in favor of granting authorization for further work on the establishment of a holding company. The Committee further supports studying the feasibility of developing a financial institute for KMA. The Committee recommends that this report, along with both recommendations #1 and #2 be adopted.

Report of the Secretary-Treasurer

It's a privilege and a pleasure to report to the membership the strong, stable position your Association is in from operational and fiscal perspectives. Careful and prudent management of finances by the Officers, Board members and staff have allowed continued operations of the Association this year, even though this marks the eighth year since dues have been increased. As reported previously, the Association is generally operated on a five-year dues structure. That three years have passed since the routine five-year planning date, is a testament to the dedication and vigilant scrutiny of financial management which is quite commendable, particularly in these inflationary times.

The many reports and resolutions contained in your packet give strong indication of the continued and active work of very many individuals and committees and shows that your KMA is an active, viable force in not only professional, but socioeconomic, legal and regulatory areas.

Probably every KMA member should take some pride in the ever-growing success of the KMA Insurance Agency and our own physician operated and controlled Kentucky Medical Insurance Company. Its vigorous, effective approach to what was once a crisis is not only gratifying, but has averted any reoccurring unavailability of liability coverage and has made KMIC a major force in the insurance market.

One other remark is pertinent, here, relating to some financial considerations the Board of Trustees has discussed that concern the development of a holding company and a financial institution. A fuller consideration is contained in the report of the Chairman of the Board of Trustees, and I would direct your attention to it.

It's probably not appropriate to the text of this report to describe in any detail the specific finances of your Association, as these are contained in full in the report of the auditor. It's sufficient to say that KMA's financial position is solid, and even attractive, from the standpoint of increased operating areas, as opposed to no increase in membership dues.

The business side of the Association is probably given little broad attention, but a brief glance at the auditor's report readily shows that because of our size and diversity of activities, KMA has become "big business." It's important to keep in mind that the Association was originally created to promote the art and science of medicine and by so doing, promote the welfare of the patients we serve. In this complex, modern world, the variety of our involvement simply gives indication of the resources necessary to fulfill those goals and the needs of the membership at the same time.

I am honored to be a part of all of these activities and to join and serve with the very able leadership of the Officers and Board of Trustees. I humbly thank you for the confidence you have placed in me and for the opportunity to serve.

S. Randolph Scheen, M.D., Secretary-Treasurer

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Secretary-Treasurer. Doctor Scheen is to be thanked for his continuing efforts and success in keeping our organization fiscally sound and maintaining a stable dues level. The Committee recommends this report be filed.

Report of the Executive Vice President

The opportunity to watch many changes in Medicine take place has come to me during my 20 years at KMA. Medicine has become increasingly sophisticated, complex, and effective. Specialization has simultaneously created and benefited from unprecedented technological growth. There have been changes in delivery mechanisms, medical care is more expensive, and the attitudes of society have changed regarding the availability of care, mechanisms for its provisions and the manner for which it should be paid.

These and other changes have generated many new medical organizations and have required basic professional organizations such as state medical associations to change so the needs of individual physicians and the profession can properly be served. At KMA, we continuously reevaluate our role, refine our procedures, and all elements of long-range planning are certainly a continuing top priority of the Association's entire organizational structure.

Membership

Each year, KMA serves an ever-increasing physician membership. Similarly, an increasing number of new physicians begin their practice each year. No one should be denied the benefits of membership because they were just never asked to join. With the help of our Membership Committee's campaign, the in-house computer, and the assistance of the membership across the state, we can increase our members and our strength by inviting new physicians to become a part of this professional organization.

Finances

We have now operated about eight years from a dues increase that was designed to last only five. The Association still remains in a strong financial position but a close watch is being kept on the heavy impact of inflation and its effect on our reserves. A slight escalation in dues in the near future might prove to be prudent as we attempt to maintain a reserve fund of significant strength to generate needed operating funds.

Activities Expansion

As a part of our reevaluation process, the Executive Committee and Board of Trustees have recommended the detailed planning for expansion of KMA services to the membership. An explanation of these is contained in the Report of the Board of Trustees (No. 5). Approval by the House of Delegates of this concept would permit an orderly approach to studying the needs of our members and the gradual implementation of these services on a fiscally sound basis.

Headquarters Building

It is possible that ground could be broken for the Headquarters Building addition by the time of the Annual Meeting. Approximately 10,000 square feet is being added to the Headquarters Office, the construction of which will be paid for by the KMA Insurance Agency. The building has been designed to aid in the growth of KMA, the KMA Insurance Agency, and the Kentucky Medical Insurance Company. It will greatly enhance our ability to provide services and benefits to the membership and completion is expected sometime next summer.

Governmental Affairs

This has been another year of increasing involvement in governmental affairs at both the state and national levels. Communication with our Congressional Delegation is ongoing and the increasing role of state government demands more staff time on a daily basis. These are often frustrating experiences but through perserverance many positive results have been achieved. The 1982 Kentucky General Assembly proved the declared independence of the legislators. One hundred Representatives and 38 Senators must be lobbied individually and continuously. Medicine's efforts in the Kentucky General Assembly were successful this year and appreciation is extended to the Key Men and other physicians who maintained contact with their Legislators on a timely basis.

Today, activity does not seem to diminish much even when the General Assembly is not in session. Interim subcommittees and state agencies require constant liaison, decision making, testifying, and negotiation. Whether through legislation or regulation, there is an accelerated movement to control how medicine is practiced and how medical services are paid for. More consumer involvement in the health care field brings a new dimension to the manner in which many problems must be approached.

The Governor's Coalition of Payors to Address Health Care Costs was formed this year without physician or other provider membership even though Kentucky physicians have been the leaders for years in seeking solutions to rising health care costs while maintaining quality care. Staff has attended and participated, as much as possible as nonmembers, at every conference and committee meeting held by the Governor's Coalition, sometimes with three or four lengthy sessions held in a single week. Monitoring will continue with reports presented to the KMA leadership for providing staff with direction and policy.

Staff

Staff has been heavily involved not only with our day-to-day activities, seminars, workshops, and representation of the Association, but also with new programs and working on new problems. The presentation of the Annual Meeting is in itself the culmination of a year's work with contributions by all of the staff members. It concludes a very busy Associational year while sounding the starting gun for us for the beginning of a new year.

It is with honor and pride that I work with such an outstanding and dedicated staff. For all of us, it has been a pleasure to serve you and we look forward to a productive year for the Association during 1982-83.

Robert G. Cox, Executive Vice President

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Executive Vice President. The Committee is impressed by the dedication and expertise of Mr. Cox in guiding our Association during his long tenure

in the office. The Committee recommends this report be filed.

Report of the Kentucky Medical Insurance Company

This year marked the completion of your insurance company's third full year of operations, and further marked its arrival as the principle medical professional liability carrier in Kentucky. We now insure more physicians than any other carrier and we intend to continue our expansion in the physician market.

As our base of insureds has increased, so have our assets and reserves. By the end of this year our assets will exceed $8 million and we will have written in excess of $3 million in premiums during the year. With this growth has come an expansion in our staff, the development of a fully computerized operation, and plans for an addition to the KMA building to house these additional services provided to Kentucky physicians.

At the request of the physician leadership in Indiana, the KMIC, along with the Physicians Insurance Company of Ohio (PICO) and the Physicians Insurance Company of Michigan (PICOM), has assisted in the formation of the Physicians Insurance Company of Indiana, which is now operational and is offering professional liability coverage to Indiana physicians in the same manner as KMIC offers coverage to Kentucky physicians. We have pledged to help the new Indiana company in any way we can, and we wish them every success.

The actuarial statistics on medical professional liability countrywide and in Kentucky continue to show an annual increase in the number of claims and the cost per claim. Recent rate increase filings in Kentucky by the Medical Protective Company, Aetna Insurance Company, and St. Paul Insurance Company, show accelerating claims loss experience within this state. The KMIC intends to continue and strengthen its loss prevention programs through vehicles such as *The Physicians' Advocate* quarterly publication, and encourages its insureds to take all reasonable steps to avoid those situations that can bring on claims.

Your insurance company, KMIC, will continue its policy of charging fair and adequate rates, building its reserves, and showing a return to its stockholders at the earliest prudent time.

Ballard W. Cassady, M.D., Chairman of the Board

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the Kentucky Medical Insurance Company Board of Directors and notes with pride the continued progress of KMIC and congratulates the Company for its success.

The Committee recommends this report be filed.

Report of the KMA Insurance Agency, Inc.

The KMA Insurance Agency, Inc., which was organized in September, 1978 by the Kentucky Medical Association (KMA), is continuing to offer Kentucky physicians homeowners, automobile and office liability insurance coverage, as well as group term life and other individual life insurance products. This is in keeping with the goal of providing Kentucky physicians with their primary insurance protection. The Agency continues to strive to meet the insurance needs of the physician by adding additional lines of coverage as the physicians' wants and needs may dictate. Expansion is synonymous with growth, and with the development of new products, the Agency is expanding into many diversified lines of insurance coverage. New life products recently made available to the Kentucky physician through the KMA Insurance Agency, Inc. include the Universal Life Policy, a low-cost, flexible life insurance plan designed to meet various individual needs, and two new disability insurance programs—Income Security and Disability Income.

Robert G. Cox, Executive Vice President of the KMA, serves as President of the KMA Insurance Agency, Inc., with Morton C. Bell assisting him in the capacity of Executive Vice President. The Agency sales force consists of two full-time agents, Tim Doyle and Bob Proffitt, who serve the entire state of Kentucky. In an effort to continue to provide the highest standards of insurance services, the Agency will be appointing several general life agents in various locations throughout the state to assist our agents in presenting the different lines of life insurance now available. The Agency's current life insurance volume in force exceeds $8,600,000 and continues to grow. The marketing in-house staff is also increasing so we may provide the best possible policyholder service to our physicians. Most services, including small claims, are handled directly from the Louisville office, which gives the physician the added benefit of personalized assistance.

The Agency is now the sales arm of the Kentucky Medical Insurance Company (KMIC) for the higher limits coverage of professional liability insurance—limits over KMIC's $100,000/300,000 and $200,000/600,000 base policies. These sales are handled exclusively through the Agency's two full-time representatives. We currently insure approximately 60% of KMIC policyholders with higher limits protection.

The continued success of the KMA Insurance Agency, Inc. is due to the interest and support of Kentucky physicians who sought a positive alternative to commercial insurance carriers—an insurance company designed strictly for the needs of the Kentucky physician—the KMA Insurance Agency, Inc.

Dwight L. Blackburn, M.D., Chairman,
Board of Directors

Recommendations, Reference Committee No. 1:

Reference Committee No. 1 reviewed the Report of the KMA Insurance Agency Board of Directors and was pleased to learn of the Agency's growth, expansion and service to our member physicians. The Committee recommends that this report be filed.

Mr. Speaker, I recommend that the Report of Reference Committee No. 1 be adopted as a whole.

The Committee would like to express its sincere thanks to Anna Marie McGinley for her secretarial assistance to the Committee. Additionally, I would like to express my sincere thanks to the members of this Committee, C. R. Dodds, M.D., Madisonville; Jerome P. Lacy, M.D., Louisville; Willis P. McKee, M.D., Shelbyville; Anne A. Wasson, M.D., Hyden, for the development of this Report.

REFERENCE COMMITTEE NO. 1:
Keith E. Ellis, M.D., Benton, Chairman
C. R. Dodds, M.D., Madisonville
Jerome P. Lacy, M.D., Louisville
Willis P. McKee, M.D., Shelbyville
Anne A. Wasson, M.D., Hyden

• Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REFERENCE COMMITTEE NO. 2

Veryl F. Frye, M.D., Somerset
Chairman

Reference Committee No. 2 considered the following Reports and Resolution:

13. Report of the Scientific Program Committee
14. Report of the Scientific Exhibits Committee
15. Report of the Continuing Medical Education Committee
16. Report of the Cancer Committee
17. Report of the Hospital Committee
18. Report of the Emergency Medical Care Committee
19. Report of the Interspecialty Council

Resolution D—University of Louisville Hospital (Jefferson County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 2 reviewed the following items and recommends they be filed as indicated, by the consent of the House, without discussion:

13. Report of the Scientific Program Committee—filed
14. Report of the Scientific Exhibits Committee—filed
15. Report of the Continuing Medical Education Committee—filed
16. Report of the Cancer Committee—filed
17. Report of the Hospital Committee—filed
19. Report of the Interspecialty Council—filed

Report of the Scientific Program Committee

The 1982 KMA Annual Meeting scientific program features the overall theme of Emergency Medicine. Each morning session will focus on emergency care from the perspective of the various specialties participating in the meeting. A highlight of the meeting will be Wednesday afternoon which will be devoted to the Impaired Physician. We are very fortunate to have two highly recognized experts on that subject with us and your planning committee feels it is a most timely topic. The Committee members and Specialty Society Presidents have gone to great lengths to bring in some of this country's outstanding speakers and we are hopeful that the membership will find their presentations useful.

The program will be held this year at the Hyatt Regency/Lexington Center. The Lexington Center is an excellent convention facility and allows us to hold the entire meeting at a single location.

A scientific program was planned late last fall and a meeting was held in December with the Presidents of the 23 Specialty Groups which will participate in the Annual Session, to discuss their part in planning the scientific program. Specialty group scientific programs held in conjunction with the General Session have proven invaluable and, we feel, provide an excellent contribution to the continuing medical education of the membership. I personally appreciate the excellent cooperation the Committee has had from the specialty societies in planning the overall meeting.

This year's Annual Meeting has again received accreditation for continuing medical education from the American Medical Association as well as several specialty societies. We urge the membership to visit the Technical Exhibit area during the course of the meeting. We feel it is a most worthwhile and meaningful adjunct to the formal scientific program and offers members the opportunity to discuss new products and become familiar with new equipment free from the interruptions and distractions of the office or hospital.

As Chairman of the Scientific Program Committee I am most appreciative of the efforts of those who have assisted in the formation of this program, particularly the Program Committee, Specialty Group Presidents and Program Chairmen.

Suggestions for future programs are always welcome by the Scientific Program Committee.

James A. Baumgarten, M.D., Chairman

Report of the Scientific Exhibits Committee

The Scientific Exhibits Committee is pleased to report that the professional quality and medical education value of Scientific Exhibits continues to improve at our Annual Meeting. The Exhibit Hall was completely filled during the 1981 Annual Meeting and members were extremely complimentary of the exhibitors for their contribution to the overall success of the Meeting. Had space been available we could have expanded the Scientific Exhibit Hall considerably. As a result, the 1982 Meeting in Lexington will provide greater opportunities for physicians and others to exhibit by increasing space allotments. Requests vary from year to year making it difficult to predict space requirements.

The KMA is recognized as having one of the outstanding medical meetings held in the United States. Annually, over 30% of our members attend and participate, which considerably exceeds most states in the U.S. Scientific Exhibits are an integral part of our Meeting and are vital in maintaining the high quality and strict adherence to the scientific theme of our Meeting.

The Committee wishes to congratulate physicians across the Commonwealth for their excellent contributions and for taking the time and expense to offer members the opportunity to advance their knowledge and medical skills.

We wish to thank the Board of Trustees and House of Delegates for their cooperation and for the opportunity to be of service to the Association.

Richard A. Kielar, M.D., Chairman

Report of the Continuing Medical Education Committee

The CME Committee continues its effort to encourage institutions and medical societies in Kentucky to seek accreditation. The Committee offers cosponsorship for any of these groups but it is their ultimate goal to have these sites meet the essentials for accreditation and become fully accredited providers of CME.

The Committee annually participates in the AMA CME Conference for State Medical Societies. This program is held in the late fall and provides highlights and observations on what can be expected in CME in the 80's. It was noted that there will be continued growth in CME with a focus on the individual physician's office as the center of the continuing education process. The quality of programming will continue to improve and there will be an effort to insure that information provided can be readily utilized in an individual physician's day-to-day practice.

A new concept in the traditional CME teaching structure is now surfacing. The "self-training concept" is gaining popularity and is challenging the old lecture/panel format. Since the individual physicians are more aware of their direct needs to improve their educational standards, the Committee feels, as is felt at the national level, that more direct emphasis on self training should be taken. Also, more physicians should be given an opportunity to participate in such functions as hospital audits. Direct involvement and experience are the best teachers.

This conference also addressed the issue of cosponsorship and the dangers of it becomming a rubber stamp for approval of programs that may not meet the criteria for accreditation. The Committee does offer cosponsorship to medical groups who do not meet the criteria for accreditation. The cosponsorship we offer is a means to temporarily provide the needed credit for an institution or group before they have completed the guidelines for accreditation on their own. It is also used to assist Speciality So-

cieties whose resources are limited and whose meetings are only held once or twice annually.

The Committee approved two of the Association's annual CME programs. The Emergency Care Seminar and the Annual Scientific Program have each been approved for 15½ hours of Category 1 Credit. In reality, the KMA Annual Meeting offers a total of 44 hours of Category 1 credit. When listing the number of credit hours for a meeting, the maximum number a physician could obtain during that time period is listed even if more hours may be added.

The Committee is pleased to recognize the Kentucky Chapter, American College of Surgeons as an accredited site in the state. The Kentucky Chapter, American College of Surgeons received a one-year provisional accreditation. Currently, there are three sites pending review which, if accredited, would bring the total number of accredited sites in the state to twelve.

The KMA's own accreditation expires this fall. The American Council on Continuing Medical Education (ACCME) will re-view the KMA by utilizing a reverse site visit. This would require members of the Committee and Staff to meet with a site team in Chicago to discuss the Program and review our application for continued accreditation. If our application is accepted, it is anticipated that we would receive a full six-year accreditation before the next review would need to be made. There is some concern in the Committee.that the reverse site visit does not adequately address certain issues covered in their accreditation application. These items could only be adequately reviewed with an on-site visit.

The Committee will continue its efforts to insure the quality of CME programs in the state. These efforts will be conveyed to the ACCME to insure that we have continued as the intrastate accrediting authority. The Committee continues to provide its services in performing on-site visits and I wish to express my appreciation to the Committee for its cooperation and assistance.

Stuart Graves, Jr., M.D., Chairman

Report of the Cancer Committee

The KMA Cancer Committee has met on two occasions during the Associational year. The Committee has focused upon two primary targets on which the Committee believes it can be of significant service to the Association and the general public. One vital area in which the Committee has interest is to inform and enlighten physicians in Kentucky by having the various regional cancer centers present an Annual Report which can be encompassed within the Final Report of the KMA Cancer Committee.

Secondly, the Committee is presently in the investigational stages of discussing and analyzing other roles the Committee might undertake in coordinating and assisting with the activities of regional cancer centers. The Committee notes that no central repository of activities and functions of the various cancer centers is available to physicians and the general public. The Committee is considering undertaking this role in coordinating programs of statewide signficance and to assist in developing various informational pamphlets and reports which might reduce costs of individual centers. Rising health care costs are an important issue in our society and the Committee, cognizant of this problem, would be interested in searching for areas in which duplication of effort is taking place. Without impeding local management and provision of services, there could conceivably be avenues of mutual interest where considerable savings could result with cooperation of the various centers. These efforts would be advisory only and would not entail specific regional or statewide planning procedures.

At its final meeting, the Committee was privileged to receive oral reports from representatives of three of the existing cancer centers regarding ongoing programs and future plans. The members were impressed with the cooperation presently taking place and the open communication between the various centers. The Committee plans to continue serving as a forum for the exchange of ideas and programs and distributing this information to physicians in Kentucky.

The Committee expressed some concern with future development of cancer centers, and wishes to stress the importance of quality of patient care, rather than purely profit motives. Trained physician staffing and support personnel, with emphasis upon feasibility studies of patient census and cancer statistics, should be thoroughly considered prior to developing new centers.

During the coming year the Committee is planning to present editorials to *The Journal of the KMA*. In addition, we are in the process of proposing to the Editors that an entire edition be devoted to cancer and related subjects.

Kentucky can take great pride in its progress and development of cancer research and treatment. The Commonwealth has been a forerunner in developing cancer centers and is recognized nationally for its progress. This achievement is a symbol of the dedication and hard work evident by the enormous fund raising and development necessary to reach the point Kentucky presently holds across the United States.

On behalf of the KMA Cancer Committee we wish to express our sincere appreciation to the membership and Board of Trustees for affording us the opportunity to serve. The Committee looks forward to a progressive and beneficial year and is open for suggestions and projects which will benefit the field of medicine and the Commonwealth of Kentucky.

R. Raphael Caffrey, M.D., Chairman

James Graham Brown Regional Cancer Center

The James Graham Brown Regional Cancer Center was dedicated on September 11, 1981. Since that time it has gradually extended to full operation with the best of equipment and a complement of specialists in the various fields of cancer.

The Regional Cancer Center building and grounds are owned by a nonprofit private corporation. A contract is in effect with the University of Louisville to provide professional care in the treatment of patients with cancer. The University is responsible for the expertise of specialists in cancer and also for the proper use of two floors reserved for research to be carried out by the University of Louisville's researchers. Finally, this Center has a teaching program for medical students, residents in training, fellows and the practicing physician. These programs are the responsibility of the University of Louisville School of Medicine.

The staff of this Cancer Center is headed by the Medical Director, Doctor Ralph Scott, a nationally known radiotherapist, who developed the original radiotherapy center in Louisville, beginning in about 1960. Doctor Scott moved to the University of Maryland for four years, to aid in the development of their Cancer Center in Baltimore. Now he has returned to his home in Louisville to carry on the excellent work for which he was well known in the state of Kentucky before his sojourn to Baltimore.

The field of radiotherapy is covered by four therapsits who have had extensive training and experience and who have for their use the most modern equipment. This includes the 20 million volt radiation machine (presented by the Kentucky Division of the American Cancer Society at a cost of $600,000, and for information, this cost has increased recently to $1,000,000). In addition the special CAT Scanner is available for treatment planning and to observe the effects of radiation and other therapies on the status of cancerous tumors under treatment.

The Department of Medical Oncology, which specifically includes chemotherapy, is one of the outstanding ones in this center. There are five nationally recognized medical oncologists in this group who have produced many publications. The quality of medical expertise in these individuals is of the first order. In addition to their treatment capabilities, their research projects and efforts involve basic research, forefront position in the newer developments in chemotherapy, and also immunotherapy.

In the field of General Surgery there are four oncologists available, with special training and experience. In the field of Gynecology, three recognized gynecologic/oncologists are available.

In the field of Pediatric Oncology, two recognized pediatricians who specialize in this field are presently treating many children with cancer.

Other specialties of medicine are available to treat oropharyngeal, lung, gastrointestinal, urologic, bone and other forms of cancer.

The CAT Scanner will be used more extensively as time passes, not only in the original treatment planning, but in the observation of patients to determine the response to treatment by a particular method and the possible indication that additions or changes be made during the course of therapy. Finally, in the follow-up of patients with treated cancer, one may determine if further treatment is necessary because of a recurrence. This advanced equipment may prove of value to the individual patient.

The policies for the treatment and care of patients with cancer are supervised by a Board of Governors composed of five members of the University and five individuals from the Regional Cancer Center Corporation. The final responsibility for the quality of care of patients, the advancement of treatment methods, the enlarging research programs in all areas of cancer, and the financial stability of the James Graham Brown Cancer Center lies with the private, nonprofit Corporation.

Laman A. Gray, Sr., M.D., President
Regional Cancer Center Corporation
Lousville, Kentucky

University of Kentucky McDowell Cancer Network Program

The Ephraim McDowell Cancer Reserach Foundation, Inc., has raised funds to proceed with Phase I of the building of a Cancer Treatment and Research Center at the University of Kentucky. It will be named the Lucille Parker Markey Cancer Center and ground breaking will take place this summer. Phase I has been designed to provide space for educational, cancer information, community and outreach programs, 28 clinical beds for protocol studies of cancer treatment and neutron therapy facilities. The Center's physical location will be adjacent to the University of Kentucky Medical Center and will be joined to it by tunnels and walkways. Phase II will be built next and

will focus on cancer research laboratories. Fund raising for Phase II is ongoing.

A search for a Director is underway and it is anticipated that a person will be appointed in the near future. Since the facility will provide a regional resource for cancer care and research, outreach and community programs are of high priority and a Director sensitive to area concerns is important. The existing management team (all interim appointments) are D. Kay Clawson, M.D., Executive Director, T. Goetz, Planning and Development, L. Heller, Operations, M. S. Coleman, Scientific Director, John R. van Nagell, Jr., M.D., Clinical Director.

A board program of cancer care as well as cancer information, diagnostic services, and outreach is being developed to cooperate with and support regional cancer care. With recently obtained state support, an important focus of planned programs will be educational and cancer informational services as well as outreach. Regional offices are now serving this role in six communities throughout Kentucky. The McDowell Network will sponsor a camp for children with cancer this summer at Camp Kysoc in Carrollton, Kentucky. This summer camp will be staffed by volunteer physicians and nurses from UK, UL, and will offer many special events such as visits by Joe Hall and the Wildcat basketball tteam, a presentation by the cast of the Stephen Foster Story, and others.

New and ongoing research programs are concentrating on bone marrow transplantation, tumor detection and localization, cancer chemotherapy, *in vitro* chemotherapy testing, neutron therapy for GYN, head and neck and brain tumors, lymphocyte marker research in leukemia and non Hodgkin's lymphoma, and carcinogenesis. A new Nuclear Magnetic Resonator (NMR) facility will focus on imaging and staging research for brain and spinal cord and other neoplasms.

Slow but steady progress has been made in developing the new Cancer Center. It should prove to be an important regional facility for cancer care, education, information and research.

Yosh Maruyama, M.D.
Member, Board of Directors
Ephraim McDowell Cancer Network

Northern Kentucky Cancer Treatment Center St. Luke Hospital

The Northern Kentucky Cancer Treatment Center, located at St. Luke Hospital, Ft. Thomas, Kentucky, is an 11,000 square foot, single purpose facility. The Center is primarily served by seven Board Certified Medical and Radiation Oncologists, but is open to all physicians who are members of the St. Luke Hospital Medical Staff. The Center, which opened in September, 1981, is capable of serving Northern Kentucky, Southern Indiana and Southwestern Ohio. The capability for expanding the facility and services was part of the original design concept and represents the commitment of St. Luke Hospital to the total care of the cancer patient.

The Center's physical location and construction make it available to the entire region. The majority of patients treated are outpatients; however, a tunnel connects the Center with St. Luke Hospital to allow inpatients to be brought there for treatment. Adjacent to I-471, which connects to I-275, the Center is conveniently located to fulfill its role as a regional facility.

The Northern Kentucky Cancer Treatment Center has nine treatment and examination rooms for inpatients and outpatients; a pharmacy for chemotherapy dose preparation; a laboratory; dietitians who perform nutrition counseling; an oncology social worker to help patients with social, emotional and financial problems; a home health program to coordinate and satisfy the needs of patients who cannot come to the Center for treatment, as well as offices for physician consultation and administrative functions.

The Center also houses a 6 MeV Linear Accelerator, which fills a major gap in Northern Kentucky's health resources, and is the second largest in the Greater Cincinnati/Northern Kentucky area. Expansion plans for radiation therapy include, in the immediate future, a simulator and a second linear accelerator. These services are coordinated with the outpatient chemotherapy clinic, as well as the 20-bed inpatient oncology floor.

The Center was built undergound for purposes of energy conservation and radiation shielding, however, the entrance and waiting room are open and provide a pleasing view of Northern Kentucky and downtown Cincinnati. The emotional needs of the patient were taken into consideration during every step of the planning process. This concept is carried out throughout the center and the result is an efficient, comfortable, and cheerful environment for the patients. The Auxiliary of St. Luke Hospital donated the art and tapestries used to decorate the Center. The Northern Kentucky Cancer Treatment Center is a resource for use by all physicians in Northern Kentucky. In recognition of the needs of all patients for continuity in their care, the family physician and surgeon are relied upon as the anchor of the cancer care. These physicians are an integral part of the treatment planning, along with the medical and radiation oncologists.

Physician and patient education is a very important part of the cancer program at St. Luke Hospital. There are clinical cancer conferences held on the second and fourth Tuesday of each month providing case presentations and discussions on a variety of topics. Patient education is a continuing effort. In addition to the services of the Center's staff dietitian and the ostomy resource nurse, there are special programs for patient education conducted by the nursing staff of the Center. Also included are continuing series of "I Can Cope" programs, a free source of education and emotional support for patients with cancer and their families and friends. The purpose of the program is to educate patients in helping themselves. A team of specially trained physicians, nurses, social workers, chaplains, dietitians, pharmacists, and recreational therapists assist cancer patients in learning about their disease and teach them to cope with their daily health problems.

At the present time, the Northern Kentucky Cancer Treatment Center has over 6,000 outpatient chemotherapy visits per year. In addition, it is expected that over 12,000 radiation therapy treatments will be provided during the first year of operation. The Center is already serving a very large number of patients and has the capability of treating all cancer patients in Northern Kentucky. In addition to the expansion and continued growth of the Northern Kentucky Center Treatment Center, additional services are in the final stages of preparation. Hyperthermia should be added to the facility within the near future. The development of a hospice program as an adjunct to our home health program will be one of our major goals for the upcoming year. The Sisters of the Good Shepherd who have a facility less than one mile from St. Luke Hospital are developing and will operate the Good Shepherd Villa. This facility will offer economical living quarters to cancer patients from more distant areas undergoing series of daily outpatient treatments at the Center. Other goals for this year include certification by the American College of Surgeons as a community hospital cancer program and participation in the Community Clinical Program, a protocol-based research program funded by the National Cancer Institute.

St. Luke Hospital and the Northern Kentucky Cancer Treatment Center are members of the Tri-State Community Hospital Oncology Program (CHOP); the Greater Cincinnati Cancer Control Program (GCCCP); the Edward A. Gall Neoplastic Disease Registry, in which we now have over five years of information and participation; the Northern Kentucky Cancer Control District of the Ephraim McDowell Cancer Network; and a delegate member of the Association of Community Cancer Centers.

CHEMOTHERAPY	PATIENT VISITS
1978	1412
1979	3058
1980	4335
1981	5201

Six Months of Radiation = 6201 Treatments, 3233 patients

Reasons For the Northern Kentucky Cancer Treatment Center

Seven percent of St. Luke Hospital admissions have primary diagnosis of cancer compared to the national average of 1-2%, probably due to this area having one of the highest rates in the country.

Campbell County has a rate of malignant neoplasms of 206/100,000, which is the highest in Northern Kentucky and exceeds the national rate of 178/100,000 by over 15%.

The CORVA Health Systems Agency's 1978-79 Health Systems Plan established the following goal to:

"Establish Primary Radiation Oncology Treatment Centers in COEVA's Northern, Eastern and Southern Subareas (Northern Kentucky)"

In order to comply with the above and continue our goal of total cancer care, providing Northern Kentucky with a facility which was not previously available, St. Luke Hospital built the Northern Kentucky Cancer Treatment Center.

Construction costs for the Northern Kentucky Cancer Treatment Center was $2.7 million.

Report of the Hospital Committee

At its June 16, 1982, meeting, the Hospital Committee once again considered the question of Unified Hospital Inspections. A representative of the Kentucky Hospital Association informed the Committee as to KHA's activities in this area, noting that the battle for elimination of duplicate inspections has been a protracted one. However, a portion of the problem may be disposed of shortly if the Department for Human Resources decides to recognize JCAH accreditation as tantamount to meeting standards for both State licensure and participation in the Medicaid/Medicare programs. Regardless of DHR's determination, two additional areas of difficulty will continue to exist. The first centers around the numerous inspections conducted by various State agencies under the authority of specific statutory provisions. In order to consolidate these inspections,

the laws authorizing each individual survey may have to be repealed. Then a separate piece of enabling legislation would have to be enacted calling for DHR or another designated agency to conduct all of these inspections at one time. The second problem which will remain unresolved stems from the high number of inspections which are purely voluntary in the sense that they are brought on at the request of the hospital, its staff or some other functionary within the facility. Coordination of these latter surveys will remain a matter for in-house planning.

The Committee noted that some assistance in dealing with inspections may manifest itself on a federal level. Proposals recently published in the "Federal Register" indicate an intent on the part of HCFA to simplify and streamline procedures by which health care facilities are now approved for participation in Medicare and Medicaid. After reviewing these proposals, the Committee determined that they should be the subject of favorable comment, and instructed staff to forward the Committee's endorsement to the Kentucky Hospital Association for relay to the Health Care Financing Administration.

The Committee was brought up to date with regard to the judicial and administrative actions which had been initiated by KHA in order to overturn an emergency regulation promulgated by DHR calling for prospective setting of rates charged for in-patient hospital care.

The Committee also reviewed a staff report which outlines recent developments in health planning. Since the HSA's have had a direct impact on hospital construction, equipment and staffing, substantial interest was expressed in the cutback of activities of HSA West and the closing of HSA East and CORVA.

The Committee requested that staff continue monitoring all of the above areas and maintain liaison with various State committees which are investigating the concept of "regionalization" of hospitals throughout the Commonwealth.

The Committee also took note of staff activities dealing with hospital medical records at the Adair Memorial Hospital and participation in various meetings of the Certificate of Need Board Standards Review Committee which surveyed and revamped the current Hospital Services and Facilities Regulations.

As Chairman, I would like to take this opportunity to thank the members of the Hospital Committee for their interest and participation in this activity.

Royce E. Dawson, M.D., Chairman

Report of the Interspecialty Council

The Interspecialty Council continues to function as an advisory and sounding board for various proposals and programs presented to the Board of Trustees. During the past Associational year most activities of concern to specialty groups have been addressed by the Committee on State Legislative Activities and the Board of Trustees, in conjunction with the affected Societies. Several ill-advised legislative proposals which would have had a severe impact upon the quality of medical care delivered in the Commonwealth were defeated by the 1982 General Assembly. Individual specialty group officers were updated weekly and afforded an opportunity to comment on legislative proposals directly affecting them. In addition, several specialty officers and representatives testified during the General Assembly on behalf of the KMA and their specialty society. The Council applauds the excellent work carried on by the Association during the 1982 General Assembly.

The Department of Specialty Services, located in the KMA Headquarters Office, continues to function on an increasing level. The Department Staff has in-house access to a large computer, printing presses and various other equipment and supplies not normally available to specialty groups. Presently the Department has contracts with 13 specialty groups and is in the process of gaining several more. The Department assumes many administrative and clerical functions, thus enabling officers and members time to serve more actively and to communicate on a broader and more effective level. The full time status of the Department also allows national specialty officers and staff quick accessibility to state societies. We urge those specialty groups not presently utilizing these services to consider the KMA Department of Specialty Services and invite them to call or visit and obtain cost estimates for their groups.

Kentucky can be extremely proud of the excellent cooperation between the various specialty societies and the KMA. This cooperation, evident over the years, has added immensely to the prestige, power and effectiveness of organized medicine in communicating with the other agencies, departments and special interest groups in our society today. The Board of Trustees has been diligent in referring items of interest to the individual specialty groups for their information and input. In addition, these specialty groups have been afforded opportunities to not only represent their specialty societies' interests, but those of organized medicine as well. Only so long as we adhere to those policies which are in the best in-

terests of the public and members of the profession shall we continue to enjoy success.

On behalf of the Interspecialty Council we are grateful for the opportunity to be of service, and appreciate the confidence placed in us by our fellow physicians.

Paul J. Parks, M.D., Chairman

End of Consent Calendar Items

Report of the Emergency Medical Care Committee

The Emergency Medical Care Committee met November 11, 1981, to plan the 12th Annual KMA Emergency Medical Care Seminar which the Committee presented on June 8-10, 1982, and to get a status report on emergency medical services in the state of Kentucky.

Much of the Committee's efforts this year were devoted to a discussion of free-standing emergency clinics. The KMA Executive Committee had referred the issue to us for discussion and asked that we make recommendations as to what the Association's policy or role should be with regard to such facilities.

Representatives of the Jefferson County Medical Society were in attendance and presented information on one free-standing emergency clinic with conditions requiring immediate action, but were referred to hospital emergency rooms because the clinic was not prepared to take care of the problem.

The question the Committee addressed concerned whether or not these clinics are truly emergency centers, or are they rather doctors' offices with extended hours? If they are emergency centers, should guidelines and/or regulations be established for minimal equipment and staff? If such guidelines are developed, who should be the regulators?

Compounding the issue is the fact that the level of emergency care varies from community to community and it would be difficult to develop guidelines to cover all situations.

A subcommittee was formed to address this issue and develop recommendations for the KMA Board of Trustees. A working report was generated by the subcommittee and submitted to the full Emergency Medical Care Committee. Committee members were invited to comment and make changes in the report. There were a wide range of opinions offered by the Committee which were condensed into a report which was submitted to the Board of Trustees in December. Your Chairman reported the Committee's recommendations and participated in the discussion of the issue by the Board. The Board took no action on the Committee's recommendations, feeling that developing strenuous guidelines for free-standing emergency clinics might jeopardize the autonomy of physicians' offices through an application of Certificate of Need regulation. The Committee will continue to give this issue close scrutiny as requested by the Board.

The majority of the Committee's energy was spent on the development of the KMA Emergency Medical Care Seminar. The program is accredited for continuing education by the American College of Emergency Physicians, the National Registry of EMT's, The American Medical Association, the Kentucky Academy of Family Physicians and the National Emergency Department Nurses Association. The meeting this year was 2½ days long and an afternoon at Churchill Downs was made available to the participants. Approximately 200 attendees participated in the "Day At The Races" on Thursday afternoon.

The program was a combination of individual lectures and several simultaneous manual skills workshops. Recertification in CPR was offered and approximately 30 people were recertified.

The Committee is most grateful to the physicians from around the state who continue to give freely of their time to come and serve as faculty for the program. The individuals who lecture and preside over the meeting receive no reimbursement for their participation or for their expenses in traveling to and from the meeting. Were it not for the generosity of these individuals, it would be impossible to present a program of this caliber for such a low registration fee. The fee charged covers the cost of meals and other incidental expenses.

The Committee recommends that the Seminar be held again next year with the Emergency Medical Care Committee as the coordinating agency. The members of the Committee have again contributed a considerable amount of time and expertise this year for which I am truly grateful.

E. Truman Mays, M.D., Chairman

RECOMMENDATION:

1. **The Emergency Medical Care Committee recommends that the Emergency Medical Care Seminar be held again in 1983 with the Committee serving as its coordinating agency.**

Recommendations, Reference Committee No. 2:

The Reference Committee reviewed the Report of the Emergency Medical Care Committee and recommends that Recommendation No. 1 be adopted. Reference Committee No. 2 also recommends that

the Emergency Medical Care Committee monitor the issue of free standing emergency clinics as to possible misleading advertising and to the improper use of the term "emergency." The Committee also recommends that the quality of care delivered through these free standing emergency clinics be monitored to assure patient welfare. (HOUSE ACTION: Referred to Board of Trustees.)

Reference Committee No. 2 recommends this report be adopted.

Resolution D

Jefferson County Medical Society

University of Louisville Hospital

WHEREAS, the newly constructed University of Louisville Hospital (acute care center) is scheduled to begin operation in the late autumn of 1982, and

WHEREAS, a center for medical excellence is essential for the continuation of clinical medical education at the University of Louisville School of Medicine, and

WHEREAS, the present University Hospital has undergone a long and difficult financial crisis in making available excellent medical care to all persons of western Kentucky, regardless of their ability to pay, and

WHEREAS, for the long term success and stability of such an institution, the University of Louisville Hospital must be able to garner continued support of its community, and

WHEREAS, after long study, the Governor of the Commonwealth of Kentucky has lent support for a proposed lease of the U of L Hospital by Humana, Inc., in concert with continued support of the University and the community, now therefore be it

RESOLVED, that the KMA support measures set forth by the University of Louisville regarding inauguration of services at the new University Hospital, and be it further

RESOLVED, that the KMA use its influence as appropriate to aid University Hospital administration in ways which will best encourage maintenance of excellent teaching programs, provision of the highest quality of medical care to all persons, regardless of ability to pay, and continued community support of the Hospital and its programs.

Recommendations, Reference Committee No. 2:

The Reference Committee reviewed Resolution D, University of Louisville Hospital, introduced by the Jefferson County Medical Society, and agrees with the intent of Resolution D and recommends that it be amended by deletion to remove the first Resolved and to delete the last ten words of the second Resolved, which are as follows: " . . . and continued support of the hospital and its programs." The amended Resolved would now read as follows:

RESOLVED, that the KMA use its influence as appropriate to aid University Hospital administration in ways which will best encourage maintenance of excellent teaching programs and provision of the highest quality of medical care to all persons, regardless of ability to pay.

Reference Committee No. 2 recommends that Resolution D be adopted as amended.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 2 as a whole.

Mr. Speaker, I would like to thank the members of the Committee: C. Dale Brown, M.D., Paducah; Jerry C. Buchanan, M.D., Louisville; Howard A. Heringer, M.D., Ft. Mitchell; and Sally Mattingly, M.D., Lexington, for time spent in listening to testimony and to those who made comments. A special thanks to Mrs. Ann Frenn for her secretarial assistance to the Committee.

Reference Committee No. 2:

Veryl F. Frye, M.D., Somerset, Chairman
C. Dale Brown, M.D., Paducah
Jerry C. Buchanan, M.D., Louisville
Howard A. Heringer, M.D., Ft. Mitchell
Sally S. Mattingly, M.D., Lexington

• Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

Reference Committee No. 3

John E. Downing, M.D., Bowling Green Chairman

Reference Committee No. 3 considered the following Reports and Resolution:

20. Report of the Maternal Mortality Study Committee
21. Report of the Committee on National Legislative Activities
22. Report of the Committee on State Legislative Activities
23. Report of the Committee on Impaired Physicians
24. Report of the Committee on Long-Term Care
 Resolution H—Model Uniform Death Act (Pennyrile Medical Society)

Report of the Maternal Mortality Study Committee

In considering the report of the Maternal Mortality Study Committee and the Reference Committee action pertaining to the report, a consensus was reached by the House members that the report of the Maternal Mortality Study Committee be referred to the Board of Trustees, with instructions to the Committee that its report be clarified before it is published in the *Journal*.

Report of the Committee on National Legislative Activities

The major national legislation affecting Medicine dealt with FTC jurisdiction over the learned professions and is embodied in S. 1984 in the Senate and H.R. 3722 in the House. Both bills deal with reauthorization of the Federal Trade Commission and appropriations for its operation. The primary point of contention in both bills centers around the authorization of the FTC to regulate medical associations from the perspective of, and their influence on, trade practices. The bills were an outgrowth of FTC action against the AMA which began in 1974 and addressed the issue of alleged restraint of trade stemming from imposition of the AMA's Code of Medical Ethics on its members.

In the Congress, FTC proponents contended that the Supreme Court ruling on the FTC versus AMA question substantiated continued scrutiny of professional associations by the FTC. The Supreme Court ruling was a four-to-four deadlock which essentially held that restraint of trade implications were embodied in the AMA Ethics but that because the Principles had been revised, those implications had been removed. Opponents of the FTC support provisions in both pieces of legislation that would remove the jurisdiction of the FTC over learned professions. This argument held that regulation of professions was appropriately conducted by state licensing agencies and any anticompetition or restraint of trade questions were subject to being dealt with by the U.S. Justice Department rather than the FTC.

In June the Senate Finance Committee passed S. 1984 with the FTC exclusion provision included. As of this writing, it now awaits consideration by the full Senate. It is gratifying to report that both of Kentucky's Senators strongly support Medicine's position, and Senator Wendell Ford played a key role as a member of the Senate Commerce Committee, which dealt with the bill.

In the House, H.R. 3722 still awaits action by the full Energy and Commerce Committee, which could occur momentarily. It is gratifying to report here that a majority of Kentucky's Congressmen not only support H.R. 3722, but are cosponsors of the bill. Successful passage of this legislation will stand as a landmark for organized medicine and every effort is being made to gain support.

Another significant issue that was addressed this year related to appropriation for health planning activities. Now held in the House Energy and Commerce Subcommittee on Health, H.R. 3554 would repeal the current health planning program and would terminate the activities of health systems agencies. Reduction of federal funds from the last fiscal year has severely curtailed activities, although the statutes have remained in effect and certain activities have continued. Once again, it is pleasing to know that a majority of Kentucky's Congressional delegation supports and cosponsors this bill. As of this writing, the bill remains in Committee, but the possibility of its progress is encouraging.

Other major topics dealt with by the Congressional delegation this year in the health arena were directed primarily to budget appropriations for the Medicare and Medicaid programs. On budgetary matters, the First Concurrent Budget Resolution for FY 83 was agreed on by the House and Senate Conference Committee in mid-June. In that Resolution, a reduction of $13.7 billion was projected. Medicare spending reductions were approved for $3.2 billion, as was a cut of $674 million in the Medicaid program. The expenditure reductions in the Medicare/Medicaid programs are based on 20 proposed changes by the Senate Finance Committee, which reflect original proposals made by the Administration earlier. These included nominal copayments; delay in Medicare eligibility; reduction of reimbursement for inpatient radiology and pathology services; a limitation in physician reimbursement increases, making physician reimbursement constant as a percentage of program costs; and others. The status of actual funding reductions and their application to the programs is still uncertain because the respective roles of the State and Federal governments have not yet been redefined, nor have affected Committees agreed on specific cuts.

KMA's activities in the national arena were devoted this year to working on the major legislative proposals, and included constant contact with members of the delegation, routine monitoring of Federal regulations and contact and comments on proposed changes to various Federal medical programs. In all these efforts, Key Men played a vital role as "back home" contacts with their Legislators and, as usual, these commu-

nications were equally as important as national lobbying efforts.

The Washington Visitation and Dinner was held again this year in mid-July with the Capital Hilton Hotel again serving as headquarters. Approximately 40 physicians and spouses were involved in the activities and several personal contacts were made. Culmination of the trip was the banquet honoring the Kentucky legislators and maximum attendance by them was enjoyed.

It is difficult to appreciate all the components that constitute Medicine's national legislative efforts. Through the years it has become one of the most effective efforts on the Washington scene, but its success rests on the continuity of individual physician participation. From the AMA Washington Office and legislative staff down to individual Key Men, the system is intricate, and to some may seem unwieldy. The real strength of the effort lies with each of us through contacts with our legislators and support of KEMPAC/AMPAC.

In this year's legislative success, it is appropriate to thank everyone who has played a part and to encourage your continued support.

Fred C. Rainey, M.D., Chairman

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed the Report of the Committee on National Legislative Activities and would like to express appreciation to Fred Rainey, M.D., for the outstanding work done by his Committee in dealing with problems relating to national legislative activities. We recommend this report be filed.

Report of the Committee on State Legislative Activities

I believe the summaries included with this report illustrate the good fortune KMA enjoyed during the 1982 session of the Kentucky General Assembly. While it is a pleasure to reflect on the success of our endeavor, we cannot ignore the fact that results of this sort have become increasingly difficult to realize.

The issues before the General Assembly are myriad, and it seems a concomitant number of individuals compete for Legislators' time in order to express their respective concerns as to certain of those issues. Therefore, your continued efforts, and those of our staff, are necessary to insure that KMA enjoys access to, and a working rapport with the 138 members of Kentucky's General Assembly.

A good relationship with the Governor's Office no longer provides assurance that legislative measures will be dealt with appropriately. "Legislative independence" is now the byword, and relationships with individual Legislators, particularly those in leadership positions, must be fostered and maintained. The Key Man System, KEMPAC and certain staff activities are designed to achieve that result, and there is no question that in 1982 KMA was equal to the task.

The point remains, however, that it is only by increasing our efforts that we will continue to prevail. It seems that everyone wants a piece of the action, and each Session the same groups and organizations return seeking to expand their area of endeavor in one fashion or another. The more established groups have become increasingly sophisticated, and they are often accompanied by newer ones seeking to initiate the trek toward governmental recognition that their brethren have already completed.

And so the cycle progresses. As the reimbursement dollar continues to shrink, so, too, will we see even more far-flung lobbying efforts aimed at gaining recognition or expanding existing areas of service delivery. A look at the summary of certain measures which KMA opposed and which were defeated during the '82 Session will provide some insight as to these present and future problems.

Senate Bill 147 would have allowed optometrists to use any and all therapeutic drugs which they deemed appropriate in treating eye disease. In effect, this bill would have allowed optometrists to practice medicine.

Senate Bill 82 would have mandated that coverage be provided under all health insurance policies for the services performed by a clinical social worker.

Senate Bill 111 called for the licensing of those engaged in the practice of lay midwifery.

Senate Bill 3 called for the certification of Physicians' Assistants, but precluded certain medical specialties from using a certified PA.

Senate Bill 249 would have required that coverage be provided under all health insurance policies for the activities of those "purveyors of health services which are licensed to perform such services."

Senate Bill 304 and **House Bill 628** would have mandated that coverage be provided under health insurance policies for the services performed by "all practitioners of the healing arts recognized by the laws of the Commonwealth of Kentucky."

House Bill 104 would have mandated that coverage be provided under all health insurance policies for the services performed by a chiropractor.

House Bill 125 would have altered the evidentiary standards applicable to adult abuse and imposed an undue liability on physicians, as well as those who

fell within the category of "caretaker" under the terms of this proposal.

House Bill 237 would have repealed the current law requiring motorcyclists to wear helmets.

House Bill 369 would have established a new Chapter of the Kentucky Revised Statutes to deal with the certification of mental health counselors and family therapists.

House Bill 590 called for physician involvement in the issue of capital punishment, inasmuch as lethal injections, and a process for their administration, would have replaced electrocution as the method of execution within the Commonwealth.

HCR 73 would have called for a study of the regulation of the health profession within the Commonwealth.

However, not all of KMA's activities were defensive in nature. As a result of resolutions passed by our House of Delegates and determinations made by the State Legislative and Quick Action Committees, the Association supported 11 pieces of legislation, 10 of which were enacted by the General Assembly. Summaries of some of those measures are set out below:

Senate Bill 271 will substantially reform Kentucky's Coroner System.

Senate Bill 2 calls for the use of child passenger restraints. While the penalty provision was deleted from this bill, it is believed that the measure will still have a beneficial and educational impact.

Senate Bill 27 requires that all drugs prescribed and marketed in Kentucky in a finished solid dosage be imprinted with a product identification symbol.

Senate Bill 32 requires that each of the Governor's Executive Orders calling for reorganization within State Government be presented to the General Assembly as a separate piece of legislation.

House Bill 531 requires that the Commissioner for the Bureau for Health Service be a physician.

House Bill 325 insures that where a district health department is established, the physician membership would be at least 25% of the Board.

House Bill 128 requires testing for inborn errors of metabolism including, but not limited to, PKU in infants.

One other item is worthy of note. The Certificate of Need Law was revised substantially during this past Session. As you are aware, physicians' private offices and clinics have always been exempted from the coverage of that statute. However, when a Senate Committee Substitute for the original proposal was introduced, it contained a provision which might well have brought the private physician community under Certificate of Need jurisdiction. KMA was able to have that provision deleted from the bill.

KMA enjoyed a remarkably successful 1982 Legislative Session. Everyone pulled together, especially the Legislative Key Men, and the results speak for themselves.

I offer my deep appreciation to the members of the Quick Action Committee, State Legislative Committee and to the key Men whose efforts have proven so valuable over the years. I trust that your personal interest and commitment will remain steadfast, and that the end result will be the continued delivery of quality health care within the Commonwealth.

Carl Cooper, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3:

The Reference Committee reviewed the Report of the Committee on State Legislative Activities and would like to commend Carl Cooper, Jr., M.D., and his Committee, along with KMA staff, for their very successful efforts during the 1982 Legislative Session. Of the 11 bills KMA supported, 10 became law, and of 15 bills opposed, none were passed.

Reference Committee No. 3 recommends this report be filed.

The 1982 Legislative Session

KMA Position	Number of Bills	Became Law	Failed
Support	11	10	1
Oppose	15	0	15
Monitor After Appropriate Amendment By KMA	7	5	2
Support in Concept	11	4	7
Monitor	56	20	36
No Opposition	1	1	0
TOTAL: 101			

Report of the Committee on Impaired Physicians

The Committee on Impaired Physicians has met six times this associational year. Meetings are routinely scheduled every other month, and more frequently if necessary.

Substance abuse, primarily problems with alcohol, remains the problem sustained by most individuals that come to the Committee's attention. Organizationally, the Committee continues to confront some difficulty in identifying individuals with problems.

A number of steps have been taken to try to resolve the identification problem, which have included increased publication of the Committee's efforts in the KMA *Journal*, mailings to physicians' homes in selected areas, direct contact with knowledgeable hospital personnel, meetings with county medical societies and hospital medical staffs and individual discussions. The results of these identification efforts are not yet satisfactory, in the Committee's view.

Considering that many individuals who have substance abuse problems develop them, or at least have the potential for their development, at an early age, the Committee has held discussions with the Deans of both medical schools. These talks were part of an effort to discuss related problems with young physicians and physicians to be. Both Deans were gratifyingly helpful, and the Committee is in the process of working together with the Deans' offices to construct routine presentation of material to medical students throughout their school years.

Individual members continue to attend local, regional and national meetings devoted to our subject of concern to share ideas with our peers and colleagues and to seek new approaches and information that can be applied to Kentucky's situation. These meetings are too numerous to mention, but through this exposure the group continues to acquire realistic and timely information.

The problem being dealt with is not restricted, of course, to the medical profession, though the Committee's efforts are. However, mutual discussions have been held with representatives of the Kentucky Bar Association, which is in the process of forming a similar activity, and the Committee wishes them every success.

A major organizational change occurred with division of aspects of responsibility to subcommittees. Subcommittees for medical school liaison, Auxiliary liaison, liaison with the Board of Medical Licensure, publicity, speaker's bureau, confrontation and followup were all created, and those Committee members with particular interest or expertise in these areas have been appropriately assigned. It is hoped that this division will streamline efforts and enable the group to focus its attention on those areas needing the highest priority at a given time.

The Committee plans to again have a booth during the Annual Session, which will be staffed by Committee and Auxiliary members, to answer questions and provide information.

Organizational considerations certainly were not the Committee's sole activity. Anywhere from 20 to 40 cases are actively monitored at any given time. The individuals so involved occupy all strata of the Committee's procedural attention, from those suspected of having problems, to those having undergone a rehabilitative course and being followed up with aftercare.

This report would be remiss if it did not again address for the edification of all that the Committee's prime objective is to be helpful, and not punitive. The Committee goal is to help individuals recognize and admit impairing problems and to work with them or seek the provision of aid in resolving their problems. From the Committee's observations, its work is less successful than some groups, but more so than others. This group's efforts have been developed through evolution and with careful consideration for the humane aspect of its duty. Members have not only diligently attended meetings, but have assiduously devoted their efforts and caring, for which great thanks are due. A special note of thanks must be made to the work of the Auxiliary, primarily through its representative on the Committee, but also through its group effort. The Committee appreciates the confidence of the membership and urges its strong assistance in helping the Committee to do its Job.

David L. Stewart, M.D., Chairman

Recommendations, Reference Committee No. 3:

Reference Committee No. 3 reviewed the Report of the Committee on Impaired Physicians and would like to express sincere appreciation for all the efforts the Committee has expended on this very important, but difficult problem. All members of KMA should be aware of the Committee's efforts and are urged to help in identifying physicians who may have problems which impair their ability to practice.

The Reference Committee recommends this report be filed.

Report of the Committee on Long-Term Care

The Committee on Long-Term Care continues to recognize the mutality of interests that physicians and long-term care facility operators and personnel share. While relatively few physicians have routine,

ongoing contact with long-term care facilities, a relatively large portion of the patient population relies on care provided through such facilities, and our joint concerns are maintained.

Due to legislative concerns, neither the KMA members or representatives of the Kentucky Association of Health Care Facilities were able to meet. Several legislative proposals suggested significant effects on the long-term care portion of the medical care community and these concerns, together with many proposed administrative changes, have occupied the majority of that Association's attention this year. Similar, though not so drastic issues, have confronted KMA in the legislative and administrative areas, also. These matters have resulted in a continuing evolution of problems that our two groups have not yet been able to confront jointly. However, we do recommend that the Committee be continued and that joint goals be pursued.

Robert E. Smith, M.D., Chairman

Recommendations, Reference Committee No. 3:

The Reference Committee reviewed the Report of the Committee on Long-Term Care. The Chairman, Robert E. Smith, M.D., made additional comments. The Reference Committee recommends that the work of the Committee on Long-Term Care be continued, particularly in light of the current study that the Cabinet for Human Resources is carrying out concerning alternative methods of providing long-term care to the elderly.

Reference Committee No. 3 recommends the Report of the Committee on Long-Term Care be filed.

Resolution H

Pennyrile Medical Society

Model Uniform Death Act

WHEREAS, the American Medical Association has after many years recommended a uniform definition of death be included in Medical Practice Acts of states and/or commonwealths, and

WHEREAS, after many years of consultation with other groups, the AMA recommends a simple definition, broad in application and consistent with the present as well as the future state of the art, and

WHEREAS, this subject has come before the Kentucky General Assembly before, and will probably come up again, now therefore be it

RESOLVED, that the Kentucky Medical Association model uniform death act for inclusion in the Kentucky Revised Statutes. The wording of the model death act is as follows:

An individual who has sustained either (1) irreversible cessation of circulatory and respiratory functions, or (2) irreversible cessation of all functions of the entire brain including the brain stem is dead. A determination of death must be made in accordance with accepted medical standards.

and be it further

RESOLVED, that this recommendation be forwarded through appropriate channels and committees to the Kentucky General Assembly and the Governor of the Commonwealth of Kentucky.

Recommendations, Reference Committee No. 3:

The Reference Committee reviewed Resolution H, Model Uniform Death Act, introduced by the Pennyrile Medical Society, and recommends it be adopted.

Mr. Speaker, I recommend the adoption of the Report of Reference Committee No. 3 as a whole as amended.

Mr. Speaker, I want to thank the members of the Reference Committee, James E. Anderson, M.D., Owensboro; R. Kendall Brown, M.D., Georgetown; Glenn W. Bryant, M.D., Louisville; and Jack Trevey, M.D., Lexington, for their dedicated efforts. I would also like to thank our Reference Committee Secretary, Mrs. Doris Crume, for her assistance.

Reference Committee No. 3:

John E. Downing, M.D., Bowling Green, Chairman
James E. Anderson, M.D., Owensboro
R. Kendall Brown, M.D., Georgetown
Glenn W. Bryant, M.D., Louisville
John E. Trevey, M.D., Lexington

Report of the KEMPAC Board Chairman

Mr. Speaker, Fellow Delegates and Guests,

It is a pleasure to report to you that KEMPAC membership has increased 10% over last year. However, it has not broken any record, which was the goal of members of the KEMPAC board for this 20th anniversary year.

Through local physician candidate support committees KEMPAC contributed almost $36,000.00 last year to candidates for the Kentucky General Assembly. About $9,000.00 has been contributed to can-

didates for the U. S. House of Representatives so far this year. As you probably know, AMPAC contributions to Kentucky candidates for the U. S. Congress are substantial. The KEMPAC/AMPAC combined contribution is limited to $5,000.00 to each candidate for each election.

Kentuckians will be electing 19 senators for the Kentucky General Assembly next year. The role of KEMPAC could be critical to the direction in which the Kentucky Legislature moves in the 1980s and we challenge each of you leaders of our profession to get to know your state and U. S. congressmen. Keep in touch with them and let them have your views on issues. Become involved, participate. It is also vitally important that you let your district KEMPAC director know how you feel in regard to certain candidates. He is your contact with the KEMPAC board of directors.

We are happy to report to you that the Federal Election Commission has ruled that auxiliary members can be solicited for membership and welcome this opportunity to have partners in politics getting involved again.

If you are not a member of KEMPAC we urge you to join. We are recommending that you become sustaining members; $100.00 is the amount as a joint membership with AMPAC and is divided proportionably. A KEMPAC booth is set up in the convention center. We invite you to stop by and talk with a KEMPAC director. Your comments and suggestions are appreciated.

In 1981 as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100% participation by doctors in Kentucky. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on the behalf of our free enterprise system and the freedom of the art and, science of medicine.

I recommend that you reaffirm and include the billing of KEMPAC/AMPAC dues in the statewide billing of 1983 KMA dues.

On behalf of the KEMPAC board, I want to thank you delegates, the KMA Board of Trustees, the Auxiliary to KMA and staff for your help and support.

Following Doctor Harrison's presentation, a motion was made, seconded, and carried to adopt the KEMPAC report.

• Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REFERENCE COMMITTEE NO. 4

R. D. Pitman, M.D., Williamsburg

Chairman

Reference Committee No. 4 considered the following Reports and Resolutions:

25. Report of the President, Blue Cross and Blue Shield
26. Report of the Committee on Medical Insurance and Prepayment Plans
27. Report of the Committee on Claims and Utilization Review
28. Report of the Coordinating Commission on Peer Review Activities
29. Report of the Committee on Health Care Costs

Resolution A—Dissolution of KPRO (Campbell-Kenton County Medical Society)

Resolution B—Health Insurance Mental Illness Benefits (Franklin County Medical Society)

Resolution G—Physician Participation in Medical Insurance Programs (William B. Monnig, M.D.)

Resolution K—Governor's Coalition of Payors to Address Health Care Costs (Board of Trustees)

ITEMS FOR CONSENT

Reference Committee No. 4 reviewed the following items and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

25. Report of the President, Blue Cross and Blue Shield—filed
27. Report of the Committee on Claims and Utilization Review—filed
29. Report of the Committee on Health Care Costs—filed

Resolution K—Governor's Coalition of Payors to Address Health Care Costs (Board of Trustees)—adopted

Report of the President, Blue Cross and Blue Shield of Kentucky

This report provides the House of Delegates of the Kentucky Medical Association with a status of activities of Blue Cross and Blue Shield of Kentucky (BCBSK).

Like all other business, BCBSK has been affected by the adverse economic conditions such as growing unemployment, business closing and layoffs, continuing high interest rates, the lack of business expansion, *etc;* however, the Plan remains strong, both financially and in the marketplace. The Corporation's contingency reserves as of July 31, 1982, represent 1.91 months of average benefit and operating costs. Currently, we have 1,460,000 members enrolled, representing some 40% of Kentucky's population.

Some positive signs are beginning to show. Inflation is predicted to hold at abut 7% for 1982. Interest rates are beginning to fall. Economists are predicting recovery from the recession, to begin during the fourth quarter of 1982 and the first quarter of 1983.

Although enrollment has slowed, claims payments continued to increase. During 1981, BCBSK reimbursed providers of health care more than $424 million, including $173 million for professional services. As administrator for Part A of Medicare, BCBSK also reimbursed providers over $371 million for services rendered to Medicare beneficiaries. During 1981, a total of 3.58 million claims were processed representing all lines of business.

It is important to note that the Blue Shield UCR Program has grown to cover over 375,000 Kentuckians and has resulted in payments for covered services rendered to Blue Shield members in excess of $43 million in 1981. Currently, over 84 percent of the practicing physicians in Kentucky participate in the Usual, Customary and Reasonable Program.

We continue to see increases in the cost of health care, a significant shift of responsibilities from governmental programs to the private sector, a business environment influenced by tight money and cash flow problems, continuing increases in personnel costs, new technology and inflation. It becomes clear that the 1980's will pose challenges for everyone in the health care industry.

Because of the increase in the cost of health care, many employers are considering a redesign of their health benefit programs. Primarily, they are looking for alternatives to the traditional first-dollar benefit packages and are negotiating financial arrangements that will improve their cash flow.

Many employers are now deciding that some type of cost sharing arrangements with employees is necessary. As a result, Blue Cross and Blue Shield of Kentucky developed a Comprehensive Major Medical Program that has the flexibility of various deductible and co-payment provisions. The Plan has received a substantial number of requests for benefit programs designed with deductibles, co-pay features and percentage type payments. The Comprehensive Major Medical Program which the Plan began marketing last year, featuring deductibles and co-payments, and based on a percentage of UCR guidelines, has now grown to more than 100,000 members.

In order that Blue Cross and Blue Shield of Kentucky be in position to assure customers of predictability of cost and to deliver benefit payments that pay physicians based on a percentage of Usual, Customary and Reasonable, it was necessary that we develop a new Participating Physician Agreement. The agreement will permit Blue Cross and Blue Shield to administer all UCR type contracts based on the individual physician's profile or the UCR guidelines. It will provide predictability for cost of the programs, uniformity in UCR administrative procedures and will hold our members harmless for balance billing above the UCR guidelines.

The new Participating Physician Agreement will continue:

- To utilize the individual physician profile.
- To use the 90th percentile technique for payment guidelines.
- To make payment for covered services to participating physicians and payments for services rendered by non-participating physicians will be made to the subscriber.
- Update payment guidelines on a quarterly basis.

The target date for implementing is January 1, 1983. Information on the new program will be mailed to all Kentucky physicians in October. Our Professional Relations staff will be available to further discuss the program with physicians.

We have been involved in several activities within the past year that will have an impact on physicians in Kentucky and on the operation of the Plan. Some of these activities include:

- In May of 1982 the Metropolitan Life Insurance Company, the Part B Medicare carrier in Kentucky, announced the termination of its contract. Following a competitive bid process, Blue Cross and Blue Shield of Kentucky was selected by the Health Care Financing Administration to be the new carrier for Part B, effective October 1. BCBSK will utilize the existing office and most of the staff in Lexington for the processing of claims for services rendered Medicare beneficiaries. A transition staff is working to ensure that there will be no interruption of service for

Medicare beneficiaries. More information will be communicated to all physicians prior to the effective date.

- A lengthy bid process was completed for the health benefits program for State and Boards of Education employees and their dependents. Blue Cross and Blue Shield of Kentucky won a two-year contract, to be effective October 1. The health benefits are essentially the same as in the past year; however, several cost containment features were included in the bid specifications for the prospective bidders. The elements in the Cost Containment section include:
 - Incentive Reimbursement for Maternity
 - Mandatory Ambulatory Surgery
 - Incentive Second Opinion Surgery
 - Early Admission Provisions
 - Concurrent Utilization and Pre-authorization

 Details on this program have been sent to all state and Boards of Education employees, physicians and other providers. Plan staff is currently meeting with medical staffs and individual physicians to further discuss these provisions.
- BCBSK has committed staff and resources to the development of a Long Range System Plan (LRSP). The LRSP is an integrated membership, billing and claims processing system. This project is one of the largest, most complex and costly improvements ever undertaken by BCBSK, but is an absolute necessity to enhance the future capabilities in service to enrolled members and providers of care.
- BCBSK has developed an implemented a Provider Communications Network (PCN). The Provider Communications Network is a paperless claims processing system that is capable of accepting claims from providers through the tape-to-tape, the computer-to-computer medium and through Cathode Ray Tubes utilizing telephone lines. Currently, hospitals can submit all claims for Blue Cross patients and Medicare Part A beneficiaries through this network. Some physicians are currently submitting claims through the PCN, and it is our plan to expand this network to other physicians' offices in early 1983.
- BCBSK has developed a new reimbursement program with member hospitals in Kentucky. Studies were performed utilizing financial and statistical data filed by contracting hospitals with the Plan in an attempt to determine the equity of payments to hospitals for the cost of purchased services. These studies demonstrated that Blue Cross and Blue Shield patients were paying more than their fair share. The new reimbursement program will continue to recognize a hospital's reasonable financial requirements; however, BCBSK will provide for an equity adjustment that will represent our fair payment for purchased hospital services on behalf of Blue Cross and Blue Shield subscribers. Negotiations began on July 1, 1982 with individual hospitals that requested rate increases at the beginning of their fiscal years. As of August 27, 38 hospitals have contracted under the new reimbursement program.
- In April of this year, the Governor announced the formation of a Coalition of Payors to Address Health Care Costs. The Coalition's goal is to ultimately reduce or slow down the rate of growth in health care costs while maintaining high quality care. Health care costs are truly issues of concern to all of us. Blue Cross and Blue Shield of Kentucky has had cost containment programs in operation for several years. Millions of dollars have been saved or averted for both our subscribers and the public in general through all of our cost containment programs. Cost containment of health care services continues to be one of our highest corporate priorities. Hospitals, their Boards of Trustees, the medical profession and others have done a great deal to offer quality health care while attempting to contain costs. Toward this goal BCBSK has provided information regarding health care costs to members of the Coalition for their assistance in deliberation of cost containment objectives.

The above activities are indicative of the attention being given to health care costs in Kentucky. Blue Cross and Blue Shield of Kentucky recognizes its responsibility for developing and implementing programs designed to provide the best quality of service at the least possible cost. To that end, BCBSK will continue to develop relationships with all providers of care.

Avil L. McKinney, President

Report of the Committee on Claims and Utilization Review

The Claims and Utilization Review Committee has met on an average of every third month during the year, and each meeting has been devoted to an average agenda of 25 cases.

No particular pattern of types of cases has been observed, but rather the whole gamut of claims questions was considered. These included questions of fees, questions regarding reimbursement of new

or multiple procedures, questions regarding the necessity and appropriateness of care rendered, questions involving quality of care, length of stay and utilization of service.

As practice patterns and medical care financing mechanisms evolve, changes occur. One trend noted is that some physicians have developed total charges based on line item services. While the Committee does not feel it is appropriate to suggest how physicians develop their charges, it is appropriate to state that whether charges are developed on a line item basis or the global concept is used, the final reimbursement requested should be equal. Line item service charge development should not be used as a method to gain increased reimbursement.

Another change observed through claims review has been the relationship between insurance companies and third-party payors and physicians who enter into contractual agreements to provide services to particular insured groups. It should be noted that contracts developed where fee profiles are agreed on in advance are not subject to peer review if a contracted fee is at issue. Certainly, mitigating circumstances that influence charges for contracted fees are appropriate to the Review Committee's consideration. Otherwise, Committee review is an inappropriate involvement in pre-agreed procedures.

Another change that the Committee has observed involves questions of medical necessity for hospital admission and treatment. Some insurance contracts contain indemnified provisions that allow hospital admissions only for specific reasons. Others, however, allow fair flexibility of reasons for admission. Unnecessary admissions obviously increase the cost of medical care, as well as constitute less than maximum quality. However, it is often difficult to determine if an admission might subsequently be considered unnecessary at the time the service is delivered. "Social" reasons generally are not sufficient for admission but, again, at times they well may be. The Committee can only urge each individual physician to use his best judgment and conscience in questionable situations.

This year a direct suit was filed against the peer review committee for its actions in considering a claim. In the suit, the Committee was charged with arbitrarily recommending disallowance of a hospital admission, but as of this writing, a motion to dismiss the suit had been tentatively granted by the judge of venue.

Referral of certain cases to the Medical Licensure Board occurred this year. Without discussing specifics, the Committee has discovered situations where the quality of medical practice of individual physicians, as indicated in the review process, was of a nature that scrutiny by the licensing agency was felt to be appropriate. This is not a new procedure, nor a first-time occurrence, but is part of the Committee's regular operating procedure.

Finally, it should be pointed out that the Committee is appointed to help assure the quality of medical care at a reasonable cost and to serve both physicians and patients in so doing. The Committee, which is constituted of members representing all medical specialties and the geographic areas in the state, has met with fervor and vigor routinely throughout the year and meetings usually consume five hours or more. My sincere thanks is extended to each member for his service and dedication.

William J. Sandman, Jr., M.D., Chairman

Report of the Committee on Health Care Costs

There have been a number of developments this past year with regard to medical care cost. The cost of health care is perhaps one of the most talked about issues today and certainly is the number one issue facing the medical profession. The question is, are we doing all we should to deal with it?

The past three years, KMA participated in the Kentucky Voluntary Effort (KVE) program we helped initiate in Kentucky. Its goal was to try to slow the rate of increase in health cost inflation. It had limited success nationally in slowing health costs; however, it did succeed in thwarting the implementation of the Carter hospital cost cap legislation.

Nationally, the Voluntary Effort, as originally structured, has been abandoned in favor of a new emphasis on coalitions to deal with cost problems. In a statement issued by the American Medical Association, the American Hospital Association, Blue Cross-Blue Shield Association, the Business Roundtable, the Health Insurance Association of America and the AFL-CIO, a call went out for the establishment of local coalitions comprised of representatives of all segments of society, to deal with the cost issue. The KVE followed that lead and reorganized in an effort to serve as a catalyst to encourage the development of local coalitions in Kentucky.

At last count, the AMA reported 119 such coalitions set up across the country with 26 more in the organizational stages. Unfortunately, Kentucky is one of two states whose Governor has appointed a "state sponsored" coalition. (Florida is the other state.) These coalitions are comprised of representatives from industry, business, labor and government, but with physicians and other health care providers serving, at best, as outside consultants.

Although the KMA, the Jefferson County Medical Society, and the American Medical Association have all vigorously protested the lack of providers as members of the Coalition, the Governor has done little more than acknowledge these protests.

Two local medical society sponsored "medicine-business' coalitions have been established in Kentucky, but their progress has been slow. The problem of health cost is awesome in scope and is one that business leaders, as well as providers, have difficulty addressing. Data gathering, research and development of action plans all take time. Neither coalition has staff and no funds appear to be forthcoming from the private sector to provide the money necessary to properly set up and maintain a coalition.

However, the State of Kentucky, through the Department for Human Resources, is devoting considerable time, money and staff to the Governor's Coalition. A goal has been set to submit a report to the Governor by November. Without provider participation in the Coalition in any role other than one of consultation, it would appear that the likelihood of a report calling for increased regulation of the provider community will be substantial, especially in the area of reimbursement.

The impact of that report may be enhanced due to a void resulting from the phaseout of health planning agencies in Kentucky. Although organized medicine has long opposed mandatory planning and called for voluntary programs, physicians have had representation in the process. Due to the withdrawal of federal funds, CORVA (the Northern Kentucky HSA), and HSA East have ceased functioning. Without outside funding, it is doubtful that HSA West will be able to continue more than a year.

Mandatory health planning is being phased out. Should providers attempt to continue the process? Planning activity now is being left to the Department for Human Resources and the Certificate of Need and Licensure process essentially by default. Should this evolving process solidify as the determinate factor, less local representation will result and political influence will remain a dominant factor in health planning.

Other health care providers have become very aggressive in the legislative arena and have significantly altered their scope of practice and ability to seek reimbursement. In just the past 10 years, chiropractors have been granted coverage under Workmen's Compensation. Podiatrists, optometrists and primary care centers are now reimbursed by Medicaid. Nurses have increased the scope of their practice legislatively and are seeking mandatory coverage under health contracts.

Recently, social workers, chiropractors, physical therapists, optometrists, audiologists and psychologists all have made attempts at legislation which would mandate coverage by private and governmental programs.

At the same time Congress and state legislatures are increasing the number of providers eligible for third party reimbursement, they are calling for massive cuts in funding of the programs from which all providers are eligible to receive payment.

An attendant problem is that as our citizens grow older and enjoy the extra years of life scientific progress has brought about, they become more susceptible to chronic illness associated with old age. With a decrease in population growth, there are less workers generating money to pay for services to these patients which creates even more strain on assistance programs. The economic pressures of double digit inflation, unemployment and budgetary deficit have signaled a massive shifting of costs to the private sector of our society. In these uncertain economic times, the private sector is no longer able or willing to shoulder this additional burden. While these programs are necessary and fulfill a commitment all of us believe is important, lawmakers are confronted with a public demand to do more with less and are looking at the provider as the most visible candidate to absorb those reductions.

We need to educate society to recognize that the individual must assume some responsibility for his or her individual health status and consider more cost effective medical care. By cost effective, we refer to "appropriate" medical care. The misuse of hospital emergency rooms, over-utilization by those patients with high option programs and funded government programs are common in our society.

Quality medical care achieves the optimal result possible for a given condition and circumstance. Thus, cost effective care can be best described as quality care which is worth it. The problem arises in reaching agreement on what is worth what, when and to whom.

The physician, when presented with a patient, must do his or her utmost to help that person by diagnosing and treating the problem. To do less would be unethical and unlawful. However, physicians in many cases can only try to undo what a person has done to him or herself over a lifetime.

Consider the evidence presented in a recent AMA report. Smoking accounts for 350,000 premature deaths each year, 80% of chronic lung disease, 83% of lung cancer in males, 43% of lung cancer in females, 20% of **all** work days lost and **150 million** excess sick bed days per year.

Smoking is known to be a contributing factor in ateriosclerotic heart disease, chronic pulmonary disease, respiratory tract cancer, cancer of the bladder, kidneys, pancreas and peptic ulcer.

In 1977, there were 464,000 cases of alcoholism in short stay hospitals alone, over 106,000 cases of cirrhosis of the liver and 18,000 cases of alcoholic psychosis. The average hospital stay for a case of primary alcoholism is eight days and this accounts for more than **three million** inpatient bed days per year.

Half of the 53,000 vehicular deaths and one-fourth of the two-million disabling traffic related injuries in 1980 were caused by drinking. Traffic accidents are the leading cause of death in young people of which half are alcohol-related.

Falls are second only to vehicular accidents in accidental deaths and cause 60% of the total injuries. Half of the fatal falls are caused by drinking, as are half of the deaths from fire, half the drownings and half of the suicides.

If we take these clinical facts and confine our attention to the cost aspects, the impact is staggering.

According to federal estimates, illnesses and accidents caused by damaging life patterns account for more than half of the $247 billion total health care expenditures in this country. This country spent nearly $125 billion in 1980 on largely preventable illnesses and accidents. If this country and this state really want to begin to cut cost, **individuals,** not coalitions, not medical societies, not legislatures, but individuals must assume a greater responsibility for their own well-being. Agencies can only serve as conduits of information to help them achieve that goal.

A most recent challenge concerns a recent Supreme Court decision which may result in curtailment of our peer review system. The total impact of that ruling, while not clear at the time this report is being written, may well signal the end of the ability of those of us in medicine to deal with our peers in restraining costs.

Health care cost is a complex issue. We face harsh economic realities on the one hand and emotional, ethical and moral issues on the other. Government adds more providers to the system and, at the same time, reduces the resources needed to adequately fund public programs. Lifestyles impact on the health of our population, but there is little effort made on the part of individual to maintain wellness and break old habits.

Kentucky physicians should assume a leadership role in dealing with this issue. There must be physician involvement at the community level if we are to assure that the controversy of health costs is addressed in a rational, fair and reasonable manner. You can affect costs. You can influence those who pay the bill and feel that costs are too high. You can influence your patients to be responsible for their personal well being and you can show them how they individually impact on costs. Local coalitions of all members of society may be one good way to start.

Walter I. Hume, Jr., M.D., Chairman

Resolution K

KMA Board of Trustees

Governor's Coalition of Payors to Address Health Care Costs

WHEREAS, Governor Brown has appointed the Governor's Coalition of Payors to Address Health Care Costs, and

WHEREAS, this Coalition is comprised of representatives of business and labor but does not include physicians or other major medical care providers in its membership, and

WHEREAS, letters protesting the absence of medical providers on the Coalition have been sent to Governor Brown by the American Medical Association, the KMA and the Jefferson County Medical Society, all to no avail, and

WHEREAS, the Cabinet for Human Resources staff has provided Coalition members information in a fashion which is biased, incomplete, and often misleading, and in a time frame which has effectively limited any indepth analysis of the subject matter prior to consideration by Coalition sub-committees, and

WHEREAS, meetings of the sub-committees have not been well attended by the Coalition members which has resulted in sub-committee recommendations being set forth without discussion by the entire sub-committee and often without a majority of the sub-committee members present, and

WHEREAS, the sub-committees have adopted recommendations drafted and proposed by the staff of the Cabinet for Human Resources which, if enacted, could have deleterious effects on the quality and delivery of medical care in Kentucky, now therefore be it

RESOLVED, that the KMA House of Delegates encourages the formation of coalitions of physicians, other major health care providers, and business, labor and industry groups to address common concerns on medical care delivery in accordance with the recommendations of the Business Round Table, Health Insurance Association of America, the American Federations of Labor and Congress of Industrial Organizations, the American Medical Association, American Hospital Association and Blue Cross and Blue Shield Association, and be it further

RESOLVED, that KMA strongly supports health care coalitions that include meaningful physician participation so that primary emphasis is given to quality medical care, including availability and access, as well as recognizing the importance of cost effectiveness and cost containment.

End of Consent Calendar Items

Report of the Coordinating Commission on Peer Review Activities

The Coordinating Commission on Peer Review Activities considered Resolution K, at the direction of the Board of Trustees. Resolution K, entitled "Quality and Utilization Review," relates to the availability of medical review in the absence of Professional Standards Review Organizations (PSROs), and was passed by the House of Delegates in September 1981.

The first "Resolved" of the Resolution called for an investigation of the phasing out of Federal funding for professional review. At the time the Commission met, the state of funding was still being discussed in Congressional committees and by Federal agencies. However, it seemed fairly certain that funding at some level would continue, as would the PSRO program, at least through the current Reagan term of office.

Another part of the first "Resolved" called for consideration of the ramifications of the withdrawal of PSRO-type review as it relates to the individual Kentucky physician and patient. No conclusions were drawn regarding such ramifications, as cessation of PSRO activities seemed improbable.

The second "Resolved" called for review of the available means of assuring review, in the absence of PSRO, by an organization with the following qualifications:

1. It be non-profit and self supporting.
2. It be organizationally independent of any governmental agency, third- party payor, professional, trade or provider association.
3. Its governing body be composed predominantly of physicians.
4. Its review decisions which might be unfavorable to a patient, physician or hospital be made only by practicing physicians (*ie,* those possessing hospital privileges), . . .

It was apparent to the Commission that these qualifications described an organization operated like a PSRO, but without any governmental ties. In practicality, the Resolution appeared to describe the Kentucky Peer Review Organization (KPRO) in the circumstance that PSRO is terminated by the Federal government.

Information available indicated that the KPRO leadership had given quite a bit of consideration to providing review for nongovernmental patients, and that KPRO is presently under contract with some self-insured corporations to perform review. Given the trend toward self-insurance by large employers, the necessity for qualified physician review, and the directions of the Resolution, it was the Commission's opinion that PSRO-type review should be continued. This opinion does not assume any endorsement or denial of the PSRO program itself.

The Commission was of the further opinion that the activities, as well as Federal directions and funding of the Kentucky Peer Review Organization, should be closely observed. Although unlikely, if the PSRO program is dismantled, efforts should be made to encourage the continuation of the PSRO-type review independently in keeping with the qualifications listed in the Resolution.

These opinions, which will appear as recommendations, were formed with the awareness that funding and operation conditions of the PSRO program are presently quite static, and that the funding of medical care and review of care may become volatile, as well as uncertain, issues in the eyes of both the public and the profession in the near future.

Glenn W. Bryant, M.D., Chairman

RECOMMENDATIONS:

1. The Coordinating Commission on Peer Review Activities recommends that KMA support and encourage concurrent, on-site review of the type currently being conducted by the Kentucky Peer Review Organization.
2. The Coordinating Commission on Peer Review Activities recommends that governmental funding and direction of the Professional Standards Review Organization be closely observed. If the PSRO program is dismantled, it is recommended that KMA work to continue PSRO-type review independently.

Resolution A

Campbell-Kenton County Medical Society

Dissolution of KPRO

WHEREAS, KPRO was created in response to an ill conceived federal law, and

WHEREAS, the KMA, though reluctant, assisted in the formation of KPRO, and

WHEREAS, the Federal Government has belatedly realized the faults in its PSRO legislation, and has

further decided to cease Federal funding of PSROs, and

WHEREAS, the AMA has requested state medical societies to assess peer review activities within their states, and

WHEREAS, the AMA has established Principles for Voluntary Peer Review, and

WHEREAS, KPRO does not meet these review guidelines, and

WHEREAS, the KMA already has established a voluntary statewide peer review mechanism, now therefore be it

RESOLVED, that the KMA strongly advocates the dissolution of KPRO, and be it further

RESOLVED, that the KMA work in conjunction with health care intermediaries, the KHA and various governmental bodies to effect continuing peer review on a voluntary basis.

Recommendations, Reference Committee No. 4:

The Reference Committee reviewed the Report of the Coordinating Commission on Peer Review Activities and Resolution A—Dissolution of KPRO, submitted by the Campbell-Kenton County Medical Society jointly. The Reference Committee felt that Recommendations #1 and #2 of Report No. 28 best reflected attainable goals and the majority view. The majority of Reference Committee members recommend that Recommendations #1 and #2 of Report No. 28 be adopted in lieu of Resolution A. William B. Monnig, M.D. asked that his dissenting vote be recorded.

Report of the Committee on Medical Insurance and Prepayment Plans

The Committee on Medical Insurance and Prepayment Plans held two meetings this year. The majority of the Committee's time was spent reviewing the KMA Blue Cross and Blue Shield group prepayment plan offered to KMA members.

The KMA Executive Committee had asked the Committee to review the plan due to a substantial increase in rates which was received this year. Because of the rate increase, the Executive Committee felt it appropriate that some Committee within KMA look over the program to be sure it was being utilized appropriately.

KMA's experience is reviewed each December, and any rate adjustments are reported at the December Board meeting. The adjusted rates then take effect the following February. The options available to KMA were a high option which is reimbursement for Usual, Customary, and Reasonable physician charges; full payment for a semi-private hospital room; and Major Medical coverage with a $250,000 maximum. The low option differed from the high option only in that there was a Schedule D for physician services rather than UCR.

A suggestion had been made that Blue Shield develop a plan which featured a front-end deductible with a copayment feature which would result in a substantially lower premium rate. That plan was developed and has been named the Comprehensive Major Medical Plan. There is a $300 deductible per person, after which reimbursement is made (both to hospitals and physicians) at a rate of 80% of the provider's reasonable charge (outpatient psychiatric care is reimbursed at 50% of the provider's reasonable charge) up to $8,000, at which time the subscriber is covered at 100% of the provider's reasonable charge up to a lifetime maximum of $1 million.

Because of the increase in rates, the Board of Trustees in December felt it might be appropriate to change the programs available to the membership. We understand from the Blue Cross and Blue Shield representatives who met with the Board, and subsequently with the Committee, that actuarially, the size of the KMA group lends itself to two options rather than three.

After some discussion, the Board felt it appropriate to continue the UCR coverage as the high option since it is by far the most popular coverage with almost twice as many subscribers as the low option, and adopt the new Major Medical Comprehensive Plan as the new low option.

One of the problems that arose as a result of this was that a great many changes had to be made administratively by Blue Shield, resulting in physicians being given only a few days to determine whether or not they wanted to continue in the KMA plan and, if so, which benefit they would choose.

Blue Cross and Blue Shield staff indicated that steps will be taken next year to ensure that adequate time is made available both to the Board and to the physician subscribers to review the plan before having to make a decision. Blue Cross and Blue Shield also extended the deadline this year for physicians to determine which plan they wanted.

Much of the Committee's time was spent in an exhaustive review of the utilization of the program. Blue Cross and Blue Shield had done a detailed study of the program, including a breakdown of admissions by diagnostic category; a breakdown based on percentage of surgical, maternity and medical cases; the most prevalent diagnoses; and admissions by age category. They had also taken the higher cost cases and tried to determine if any unusual pattern developed, whether in usage by the physicians' office staff and

family or the physician or family; physicians' specialty, location and diagnosis upon admission.

That review did not indicate that there was any specific area of inappropriate utilization. The physicians' overall utilization breakdown compared favorably to that of the rest of the State in all areas except in average cost per case and average cost per day. The review of these areas suggested there might be increased inpatient diagnostic work done which might reflect a higher cost per case and per day than average. We asked Blue Shield representatives to pursue this a bit further, which required a manual random survey of cases.

Blue Cross and Blue Shield representatives came to the May 12 meeting with a detailed utilization study which revealed a high number of short stay cases (one, two, three day stays), many without evidence of definite treatment. The percentage of short stay admissions for "minor problems" was 62% of all cases under the KMA group, compared to a statewide average of about 45%, and included a high usage of inpatient diagnostic lab and x-ray work, as well as higher than average cost for dressings, medication, oxygen, and EKG's.

The study also indicated that about 10% of the surgical claims paid under the KMA group were for surgical diagnoses, for which Blue Shield will pay if done on an outpatient basis.

Blue Shield staff pointed out that a possible reason for the higher percentage of admissions might be a general misunderstanding of coverage, resulting in patients utilizing inpatient diagnostic studies rather than outpatient studies.

The Committee recommends that individual physician subscribers become more cognizant of the effect their group utilization has on the rates of the entire group. The Committee has suggested that the Board consider a **Journal** article which might discuss examples of where usage habits can be changed to cut costs. Blue Shield's staff has indicated a willingness to attend meetings with subscribers on request to discuss this subject further.

The Committee has also asked that Blue Shield conduct a quarterly audit of the KMA utilization plan rather than an annual one, and Blue Shield has complied with the request.

There has been a great deal written lately about the cost provocativeness of first-dollar coverage in increasing health care costs. Since KMA's options are one of either first-dollar coverage or one of substantial out-of-pocket coverage, there may be an opportunity to examine firsthand whether or not a copayment feature does, in fact, inhibit utilization.

In previous years, KMA's choice of health plans offered to its members was limited because premium cost was not as significant a factor as it is today, and only two or three plan options were available. Recently, various options have begun to be made available by Kentucky Blue Cross and Blue Shield. One of the areas the Committee on Medical Insurance and Prepayment Plans intends to discuss when we meet this fall is what features would be most appropriate for endorsement by KMA in its group health plan. The Committee has even discussed the possibility of "tailoring" a plan just for physicians and we hope to report on the feasability of such an undertaking next year. In the meantime, the Committee would be pleased to have comments from the membership regarding your preference in coverage options.

The Committee also met with representatives of the Kentucky Psychiatric Association who had expressed concern with the Blue Cross and Blue Shield Comprehensive Major Medical Plan reimbursement for outpatient psychiatric services. As noted above, the current reimbursement rate is 50% of the reasonable fee charged, whereas other outpatient physician services are covered at a rate of 80% of the reasonable charge. The Committee learned that the cost of upgrading psychiatric reimbursement under KMA's contract to the 80% rate was minimal and, as a result, recommended that outpatient psychiatric services under the Major Medical Comprehensive Plan be reimbursed at the same level as other specialties.

The Committee also recommends that the Kentucky Psychiatric Association be requested to establish guidelines on boundaries of treatment and to develop more comprehensive peer review of psychiatric cases. According to the Kentucky Psychiatric Association representative who met with us, the most expensive part of treatment for mental illness is in the first 10 visits. Long-term psychotherapy is often largely educational, and perhaps payment for that should come from a financial source other than medical insurance.

The Committee has been most diligent in its activities this year, and I am most grateful to the members for their support.

Earl P. Oliver, M.D., Chairman

RECOMMENDATIONS:

1. The Committee recommends that individual physician subscribers become more cognizant of the effect their group utilization has on the rates of the entire group.

2. The Committee also recommends that the Kentucky Psychiatric Association be requested to establish guidelines on boundaries of treatment and to develop more comprehensive peer review of psychiatric cases.

Resolution B

Franklin County Medical Society

Health Insurance Mental Illness Benefits

WHEREAS, emotional and mental illnesses cause disability, pain, suffering and may lead to death in a manner similar to other medical disorders, and

WHEREAS, emotional and mental illnesses can be diagnosed and treated by physicians in an effective manner, and

WHEREAS, reimbursement to physicians for the diagnosis and treatment of emotional and mental illness by health insurance carriers and other third-party payors has proven controllable, predictable and cost effective, and

WHEREAS, the American Medical Association and its House of Delegates on more than one occasion has supported the position that benefits covering emotional and mental illness be provided equivalent in scope and duration to those provided for other medical or physical illnesses, and

WHEREAS, there is no statutory law in Kentucky presently mandating either the offering or assurance of nondiscriminatory benefits as related to the diagnosis or treatment of emotional or mental disorders by physicians, and

WHEREAS, certain major insurers of health care in Kentucky are now actively marketing policies which significantly discriminate against reimbursement for services to subscribers who seek the diagnosis and treatment of emotional and mental disorders from physicians, now therefore be it

RESOLVED, that the Kentucky Medical Association endorses the principle that health insurance reimbursement to physicians should be equivalent in scope and duration for treatment of emotional and mental illnesses to those for other medical or physical illnesses.

Recommendations, Reference Committee No. 4:

The Reference Committee considered the Report of the Committee on Medical Insurance and Prepayment Plans and Resolution B—Health Insurance Mental Illness Benefits, submitted by the Franklin County Medical Society. Both recommendations of the Report and the "Resolved" of the Resolution dealt with the same issues. The Reference Committee members recommend that Report No. 26 and Resolution B be adopted.

Resolution G

William B. Monnig, M.D.

Physician Participation in Medical Insurance Programs

WHEREAS, Kentucky Blue Cross and Blue Shield provides the health insurance coverage for the great majority of private pay patients in the state of Kentucky, and

WHEREAS, Kentucky Blue Cross and Blue Shield has recently become the Intermediary for Title XVIII, Part B, recipients in the state of Kentucky, and

WHEREAS, Usual, Customary and Reasonable fees for medical service have widely variant definitions even in the state of Kentucky, and

WHEREAS, Kentucky Blue Cross and Blue Shield has signed contracts with 87 percent of the physicians in the state of Kentucky as participants in its UCR plan, and

WHEREAS, Kentucky Blue Cross and Blue Shield continues to reimburse out-of-state nonparticipating physicians directly and in higher amounts than in-state physicians, and

WHEREAS, Kentucky Blue Cross and Blue Shield plans to market new "hold harmless" policies and seek the enrollment of all Kentucky physicians in its all inclusive participating physician agreement, and

WHEREAS, this marketing plan of Kentucky Blue Cross and Blue Shield will effectively remove the determination of fee-for-service from the realm of physician control, and

WHEREAS, Kentucky Blue Cross and Blue Shield has recently bargained with certain hospitals for discount prices for its policyholders, now therefore be it

RESOLVED, that the KMA change its policy on Participating Physician Agreements to state:

> Henceforth, the KMA cannot in good conscience take an indifferent attitude toward Participating Physician Agreements between individual members of the KMA and the various health insurance providers.
>
> The KMA is aware of the risks of the physician divorcing himself from determining the upper limit of fee-for-service.
>
> The KMA is aware of the danger of the possible monopolistic control of physician fees by third-party agents;
>
> and be if further

RESOLVED, that the KMA, as individual members, as an organization, and jointly through affiliation with the AMA, investigate what legal steps, if any, can be taken to prevent third-party carriers from usurping the determination of fee-for-service from the physicians.

Recommendations, Reference Committee No. 4:

The Reference Committee discussed Resolution G—Physician Participation in Medical Insurance Programs, submitted by William B. Monnig, M.D. After discussion, the majority of the Reference Committee members recommend that Resolution G be rejected. William B. Monnig, M.D. asked that his dissenting vote be recorded.

The Committee recommends adoption of the Report of Reference Committee No. 4 as a whole.

Mr. Speaker, the Committee would like to express its thanks and appreciation to Mrs. Ann Powell for her secretarial assistance to the Committee.

Additionally, Mr. Speaker, I would like to express my sincere thanks and appreciation to the following members of this Committee: David H. Bizot, M.D., Louisville; Christopher A. Boarman, M.D., Lexington; William B. Monnig, M.D., Erlanger; James F. Rozelle, M.D., Hopkinsville.

Reference Committee No. 4:

R. D. Pitman, M.D., Williamsburg, Chairman
David H. Bizot, M.D., Louisville
Christopher A. Boarman, M.D., Lexington
William B. Monnig, M.D., Erlanger
James F. Rozelle, M.D., Hopkinsville

• Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.

REFERENCE COMMITTEE NO. 5

Edwin J. Nighbert, M.D., Lexington Chairman

30. Report of the Committee on Maternal and Child Health
31. Report of the Committee on Medicare and Other Governmental Medical Programs
32. Report of the Committee on HSAs
33. Report of the Technical Advisory Committee on Physician Services (Title XIX).
34. Report of the Committee on Community and Rural Health
35. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

Resolution C—Nuclear Weapons (William P. VonderHaar, M.D.)
Resolution F—Citicare (Jefferson County Medical Society)
Resolution I—Citicare (Board of Trustees)
Resolution J—Medical Services Provided by Health Departments (Board of Trustees)

ITEMS FOR CONSENT

Reference Committee No. 5 reviewed the following items and recommends they be adopted or filed as indicated, by the consent of the House, without discussion:

30. Report of the Committee on Maternal and Child Health—Filed
31. Report of the Committee on Medicare and Other Governmental Medical Programs—Filed
32. Report of the Committee on HSAs—Filed
33. Report of the Technical Advisory Committee on Physician Services (Title XIX)—Filed
34. Report of the Committee on Community and Rural Health—Filed
35. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports—Adopted

Resolution J—Medical Services Provided by Health Departments (Board of Trustees)—Adopted

Upon consent of the House, Resolution J was removed from the Consent Calendar. The remainder of the items on the Consent Calendar were filed or adopted as indicated.

Report of the Committee on Maternal and Child Health

KMA's Maternal and Child Health Committee met on July 1, 1982, to discuss the impact which the recently adjourned session of the Kentucky General Assembly might have on the Committee's area of inquiry. The Chairman also directed the members' attention to recent Federal regulatory activity and to the action of the KMA Board of Trustees regarding a recommendation which the Committee had forwarded to the Board for consideration.

In the legislative area, KMA staff highlighted difficulties which existed in reaching to Senate Bill 111 which called for further licensing of lay midwives. This bill was defeated during the 1982 Session, but it is anticipated that the same legislation will be discussed again during the Interim Session and another bill will be introduced in 1984. The Committee discussed various ways in which the medical community,

particularly the specialties of obstetrics and gynecology, might better deal with this situation and inform the public regarding the potential perils attendant to home births. It was also pointed out that regardless of the response determined to be appropriate, it must be voiced in light of the fact that we are not dealing with a purely medical or legal issue, but rather one which is intertwined with a particular social outlook or value system.

The Committee praised the fact that the General Assembly had passed a bill dealing with child passenger restraints. While the bill as passed did not contain a penalty provision, the Committee nevertheless felt that the legislation would serve an educational and beneficial purpose.

The Committee also reviewed the omnibus revision of Kentucky's abortion law and noted that several lawsuits have been filed seeking to enjoin the enforcement of that law. Staff noted that the Court might well curtail any additional activity with respect to the new law until such time as the U.S. Supreme Court renders a decision in the case of **Akron Center for Reproductive Health, Inc. v. City of Akron,** which comes before that Court under essentially the same facts and circumstances which give rise to the Kentucky litigation.

The Committee reviewed regulatory changes, noting on a State level that new guidelines had been promulgated to deal with alternative birthing centers. Because these regulations were of some concern to KMA, your Chairman and staff were actively involved in proposing various changes which made the regulations more acceptable to all concerned. In the Federal arena, the Committee looked toward a recently proposed requirement relating to minors which would mandate notification of their parents or guardian within 10 days of the prescription of any contraceptive drug or device.

The Committee received a report on the current status of funding for neonatal care in Kentucky. It also reviewed the KMA Board of Trustees' response to the recommendation made at the Committee's November 11, 1981, meeting in regard to this type of funding. While there appeared to be some conflict between the Board's action and that desired by the Committee, the members noted that current funding procedures were nevertheless in line with those initially recommended by the Committee and forwarded to the Board.

As Chairman of the Committee, I express my appreciation to the members for their service and their contribution to the Association and to medicine in general. I would also like to thank the KMA staff for its assistance to our Committee.

Van R. Jenkins, M.D., Chairman

Report of the Committee on Medicare and Other Governmental Medical Programs

The Committee on Medicare and Other Governmental Medical Programs held no formal meetings this year. However, it did function informally by representing individual physician problems with the program to the carrier. In each instance, fortunately, the problems were resolved without a great deal of unnecessary activity.

Probably the major concern with Medicare this year has been the change in intermediaries. The Metropolitan Life Insurance Company has served as Kentucky's Medicare Part B carrier since the program has operated in the state. Effective, October 1, this year, Metropolitan will terminate its intermediary operations, by company decision.

As of this writing, a replacement intermediary has not been selected by the Department of Health and Human Services, although more than five different insurance companies and third-party payors have expressed interest in acting as the Part B carrier. Included in these interested parties are Blue Cross and Blue Shield of Kentucky, as are other commercial and Blue Shield plans from out of state.

A decision on the replacement carrier was to have been made and announced on July 15, but the selection and announcement have been postponed several times to this point. The membership should look with close scrutiny at the change in carriers. Obviously, some transition confusion can be expected. More important is the corporate philosophy of any new intermediary named. While some problems were experienced from the physician's perspective with the administrative operations of Metropolitan, the company did make sincere attempts to establish and maintain a working relationship with KMA. That sort of relationship, or even an improved one, will be essential to continued acceptance by Kentucky patients and physicians of the Medicare program's goals.

The Committee will devote its attention to these major changes as they develop.

Paul J. Parks, M.D., Chairman

Report of the Committee on HSAs

It became apparent at the last meeting of the Committee on HSAs that the role of those agencies was about to change dramatically. Appearance has given way to reality, for HSA East determined to close its doors on June 30, 1982. The Agency's decision came in the wake of a total absence of State funding and

a dramatic cutback in Federal appropriations for health planning. EKHSA's governing board stated that it was encountering "progressive difficulty operating under rigid Federal guidelines and funding reductions," and the effectiveness of the Agency's activities was beginning to wane. At this point there has been no indication from either the Department for Human Resources or the Governor's office as to what entity, if any, will be used to replace HSA East as the planning and project review mechanism for Certificate of Need purposes.

HSA West appears to enjoy a substantially better fiscal situation than its eastern counterpart. While no State funds have been appropriated, HSA West continues to receive some Federal funding, and a new grant of approximately $400,000 will come on line in September. This will be fiscal 1982 money, for West's fiscal year runs from September to August. The previous year's budget was approximately $800,000, so funding is obviously diminishing. HSA West anticipates that private contributions over and above the Federal grant will bring its budget to around $600,000 for the upcoming fiscal year. In view of the fact that West's funding for fiscal 1980 was $1.2 million, some concern has been expressed as to the sort of role the Agency is now going to play. Several alternatives have been discussed, most notably:

1. Implementation of a scaled-down HSA role;
2. Creation of a non-profit, corporate entity available to perform review and planning functions;
3. Continuation of the current program; and
4. Dissolution.

It is difficult to determine precisely which of these alternatives will be selected. There are unquestionably problems which would accompany the implementation of both the first and third alternatives. These result from Federal legislative mandates, particularly those relating to staffing levels. Current Federal law calls for one staff person for every 100,000 individuals in the service area. Absent a change in those Federal requirements, HSA West cannot meet this staffing requirement under anticipated budget provisions. However, some relief may be forthcoming in the form of proposals currently before Congress which would eliminate many of the Federal constraints in this area.

The State's third planning agency, CORVA, previously dealt with southern Ohio and the three northern Kentucky counties of Kenton, Campbell and Boone. Despite Ohio's decision to stop using HSA's entirely, CORVA has filed a request with the Federal Government for continuation of its HSA designation. At this point opinions vary widely as to how the Federal Government will react to this request. Regardless, controversy will exist as to the role this agency will play in the health planning arena. Its Board is on record as supporting continued activities as a local, voluntary, non profit corporate planning agency in the event the request for continuation is denied. Local funding seems to be available to this agency, but as noted earlier, the amount of involvement it will have in future local planning is unpredictable.

This Committee has previously expressed concern that the statutory provision dealing with membership on the Certificate of Need and Licensure Board prohibits the physician members from serving either as Chairman or Vice Chairman of the Board. In reaction to these discriminatory provisions, House Bill 814, introduced in the 1982 Legislative Session, contained a subsection which called for the election of the Chairman from the membership of the Board as a whole. Unfortunately, this subsection was deleted from the legislation when a Committee Substitute for the bill was introduced.

Although the Committee did not meet formally this year, the Chairman would nevertheless like to take this opportunity to express his appreciation to the Committee members for their continued interest and assistance.

Harold L. Bushey, M.D., Chairman

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The Technical Advisory Committee on Physician Services is a five-member statutorily required group. Its purpose is to advise the Medical Assistance Advisory Council on matters relating to physician services. In this role, it also represents KMA and individual Medicaid-participating physicians.

A number of changes to the program were suggested this year by the Department for Human Resources, which ranged from severe funding reductions to limitations on prescriptions for maintenance drugs.

The Advisory Council devoted a considerable amount of time to cost containment efforts to reduce the Medicaid budget by $27 million, which was a predicted shortfall at the time the executive budget was approved by the General Assembly. Since that time, however, it has been projected that the shortfall will not be as severe. Some changes considered at the time with regard to physicians were postponing the annual profile update, reducing the amount of reimbursement for in-hospital procedures from 60 to 90% of allowable Medicare charges after the first $50 of each line item amount, and a complete change in the reimbursement system to stipulate fees, rather

than reimbursement based on prevailing charges. At the time of this writing, it's fairly well assured that the latter change will definitely not be made. Other changes may occur.

A regulatory change was proposed that would allow payment for surgical procedures only if performed on an outpatient basis. KMA's concerns were expressed about this proposal to the effect that physicians should be allowed to admit patients requiring the stated procedures if mitigating circumstances dictated, and that consideration should be given to those areas where sufficient outpatient facilities were not available. Both of these considerations were included in revised regulation which will soon go into effect.

With regard to routine procedures that the Committee considered, which included such items as higher reimbursement for Board certified individuals, difference in reimbursement for lab services of independent labs as compared with hospital lab charges for patients, necessary medical records documentation for inpatient treatments, and the initiation of a new computer system for claims processing.

A final issue undertaken by the Advisory Council was the implementation of the "CITICARE" program for Medicaid recipients in Jefferson County. Although information about this proposal continues to develop, certain basic items are to be effected. The CITICARE program will be administered by a CITICARE agency located in Jefferson County through individual physicians. Each individual physician who participates must agree to treat a minimal number of recipients amd will receive in return a capitation payment monthly for each of them. The single rate capitation payment will have to cover all medical services the recipient receives, which includes specialty physician care, laboratory, x-ray and hospital. The specific payment mechanisms to providers other than the primary physicians have not been finalized as of this writing, although there will be a $5,000 per patient maximum beyond which the primary physician will not be liable.

This proposal would require the primary physician to control unnecessary utilization because all services would be provided by or referred through him. Supposedly, the primary physician would have an incentive to control utilization because he would be at risk in that he would be liable for any costs that exceeded the capitated rate, but at the same time, would receive any funds in the capitated rate not expended for care. The Committee feels that considerable scrutiny should be given the program, which is to begin initial operation on October 1. While the program would help assure the availability of care, some questions might be raised as to the depth and breadth of the role the primary physician would be expected to play.

Harold L. Bushey, M.D., Chairman

Report of the Committee on Community and Rural Health

The Community and Rural Health Committee met on one occasion during the year to review proposals by the Department for Human Resources and to make recommendations to the Board of Trustees. The Department was contemplating reductions in specific health and medical areas where costs exceeded the benefits derived.

The Committee reviewed tuberculosis testing for school personnel as presently regulated by the Department and considered proposals which alter previous standards. The following recommendations were referred to the April, 1982 meeting of the Board of Trustees for its consideration in the determination of KMA's official position:

1. Require school personnel to be tested for tuberculosis upon employment;
2. Require school personnel exhibiting symptoms of chronic respiratory disease to be tested for tuberculosis;
3. Require school personnel exposed to infectious tuberculosis to be tested for tuberculosis;
4. Allow for the discretion of local Boards of Health to recommend policies for tuberculosis screening and prevention.

It is our understanding that the Department for Human Resources has concluded that standards with regard to school personnel should be the prerogative of local and district Health Departments. These standards should be coordinated in consultation with the local medical community and school administration based on epidemiological occurrences.

The Committee continues to review statewide immunization requirements and statistics supplied by the Department for Human Resources. We also concern ourselves with the adherence of school districts to statutory requirements. Kentucky appears to rank rather high nationally and the local Boards of Education are to be congratulated for closely monitoring their students and enforcing the law.

The Community and Rural Health Committee very strongly supports the provisions of the present law requiring first year students to obtain a physical examination by a physician prior to acceptance into the school system. We believe that past history and recent studies and experience in certain locales require the continuation of the present requirements.

As Chairman, I wish to thank the Committee members for their cooperation and participation. Our Committee is open to suggestions and would be pleased to consider projects of interest to the membership of the KMA.

Don R. Stevens, M.D., Chairman

Report of the School Health, Physical Education and Medical Aspects of Sports Committee

The School Health Committee has been actively pursuing a number of items this past year. The resolution for support of athletic trainers that was passed by the KMA House in 1981 was submitted to the 1982 General Assembly. We are pleased to announce this resolution was passed during the 1982 session. The resolution encourages the General Assembly to monitor the status of the athletic trainer program on an ongoing basis and provide physical assistance when feasible.

The Committee was requested to provide input on a problem concerning the Department of Education's acceptance of preschool physicals conducted by non-physicians. State law requires that all children receive a physical examination signed by a physician before entering the public school system for their first time. The Department for Human Resources, Bureau for Health Services oversees the requirement for school examinations, but enforcement is through the local communities' school system. The Bureau for Health Services undertook a study to determine who was performing the preschool physicals and what kind of financial expenditure was being incurred by the state. The Committee met with representatives of the Bureau for Health Services to discuss the findings of the survey, which the Committee found to be incomplete and erroneous. The survey did indicate one point that was a concern to the Committee, which was the performance of physicals by non-physicians.

It was the consensus of the Committee that for a non-physician to perform a physical provided little, if any, benefit to the individual receiving the test. Paraprofessionals are not trained as diagnosticians and they can do more harm than good to these children participating in these screening programs. Also, since the state's figures mainly drew from the indigent care population, the Committee felt it was extremely imperative to have these high risk children obtain a physical from a physician. The Committee reiterated its feelings to both the Bureau of Health Services and the Board of Trustees.

The Committee pledged its support to assist the Bureau of Health Services in obtaining physicians to conduct the preschool physicals for students who are unable to obtain physicals by other means. The Committee urged that these issues be referred to the local medical community and the citizens of those areas. It was felt that the community would arise to the challenge and insure that all preschool children have an appropriate physical and needed innoculations before entering school. The Committee urges physicians to check in their community to insure that adequate medical coverage is provided and that the preschool medical exams are conducted by qualified physicians. The Committee also urges physicians to volunteer their support to the high school athletic programs in their area.

Over 50% of the high schools in the state now receive support from a team physician. However, there are some areas that have sought the assistance of non-physicians to provide coverage at their sporting events. The Committee feels this is another instance where medicine needs to take the initiative and offer its services to insure that the populace receive the best medical care. There is also the possibility that the lack of proper medical care could result in additional injury to a young athlete.

The 1982 Medical Aspects of Sports Symposium was another success, with the registration exceeding 175 physicians, coaches and trainers. The program this year utilized local speakers to provide instruction and hands-on workshops in subjects ranging from preventive medicine to CPR training. The Board of Education provided its support by declaring this as a qualified program for school faculty members for reimbursement of expenditures incurred while attending this program. It is regrettable that this decision was not made until approximately two weeks before the program, else the registration may have been larger.

Plans are currently underway for the development of a program for the 1983 Sports Symposium. The Committee continues to enjoy a very satisfying working relationship with the University of Kentucky, Office of Continuing Medical Education. We wish to express our sincere appreciation to Doctor Frank Lemon and Ms. Joy Greene for their assistance in the development and implementation of this program.

The Committee continues its efforts to disseminate information on a comprehensive school health program for Kentucky schools, grades K-12. The school health program features a comprehensive educational process that stresses basic health care for young adolescents to young adults. Both the KMA Auxiliary and the American Lung Association of Kentucky are actively involved in assisting communities in devel-

oping these comprehensive programs. The Committee encourages any community wishing to review these programs in further detail to contact either the Auxiliary or the Kentucky Lung Association.

The Committee continues to provide short presentations on "Pre-season Conditioning and Prevention of Athletic Injury." These conferences are presented by the Kentucky High School Athletic Association and the Committee is pleased to be allowed to provide this instruction to high school coaches and team officials.

The Committee has been requested to develop a physical examination form to be utilized by physicians in conducting physicals of the state's high school athletes. The Committee reviewed several different forms utilized by physicians from across the state. It is the consensus of the Committee that each form has its merits and to develop one all inclusive form would be impossible. At this time, the Committee is retaining a sample of each of these forms, and when requested, will provide a copy of each for a community to select and develop the questions to be utilized on their own individual form.

I would like to take this opportunity to personally thank, the members of the School Health Committee. This large Committee provides excellent support and it is a pleasure for me to serve as its Chairman.

R. Quin Bailey, M.D., Chairman

RECOMMENDATIONS:

1. The Committee recommends that the House of Delegates strongly support the position that requires physicians to conduct preschool physical examinations of children. The Committee also recommends that the House urge physicians to assist local communities to meet this medical need in cooperation with local school boards, and that the membership be kept informed of these efforts.

2. The Committee recommends the continued cosponsorship of the Medical Aspects of Sports Symposium with the University of Kentucky, College of Medicine for the spring of 1983.

End of Consent Calendar Items

Resolution J

KMA Board of Trustees

Medical Services Provided by Health Departments

WHEREAS, the traditional role of health departments with regard to the provision of medical services has been in the areas of epidemiology, immunology, and the provision of general health care services otherwise unavailable to the medically indigent, and

WHEREAS, the provision of routine medical care by health departments to nonindigent patients is inappropriate, in direct and improper competition with private practitioners and disruptive to any cooperation between the private and public sectors, and

WHEREAS, there is evidence that health departments have been directly soliciting private pediatric patients for immunizations, now therefore be it

RESOLVED, that KMA strenuously opposed solicitation of private patients and provision of routine medical services to them by health departments, and be it further

RESOLVED, that this position be relayed to the Secretary of the Cabinet for Human Resources and efforts to terminate this practice be vigorously undertaken.

R. J. Phillips, M.D., Vice Chairman of the Board of Trustees, was recognized who stated that the Board had received assurances from David T. Allen, M.D., Commissioner for Health Services, that the state health department opposed direct solicitation of private patients by health departments. Doctor Phillips then made a motion on behalf of the Board of Trustees that the three Whereas sections of Resolution J be deleted.

The motion was seconded from the floor and carried.

A motion was then heard, seconded, and carried to adopt the Resolved sections of Resolution J.

Resolution C

William P. VonderHaar, M.D., Louisville

Nuclear Weapons

WHEREAS, the possibility of a nuclear war is an issue which a family physician cannot avoid, and

WHEREAS, the medical consequences of nuclear war and nuclear weapons are known; such as vaporization, burns, blasts with winds up to 600 mph, radiation, 100% fatality within a 1½-mile radius of ground zero, and

WHEREAS, family physicians have an obligation to speak out against this possible final epidemic, and

WHEREAS, family physicians have an obligation to educate the public, after educating themselves on these matters, and

WHEREAS, there is a singular opportunity [the Secretary of the Cabinet for Human Resources of the Commonwealth of Kentucky is a physician] to impact the Commonwealth of Kentucky with regard to this potential epidemic, now therefore be it

RESOLVED, that the KMA Board of Trustees be instructed to appoint a high level committee to work with the Secretary for Human Resources with regard

to setting up a statewide continuing medical education program for all physicians, and be it further

RESOLVED, that part of the charge of this committee would be to establish a program to: 1) educate physicians with regard to the problems of nuclear war; 2) develop measures to prevent nuclear genocide; and 3) to work with family physician organizations worldwide such as the World Health Organizations, the Canadian Academy of Family Physicians, the Royal College of Family Physicians, and the Soviet Academy of Medicine Science to prevent nuclear war, and be it further

RESOLVED, that the Kentucky Medical Association select or request the Secretary of the Cabinet for Human Resources to select an appropriate person to chair such a committee, and be it further

RESOLVED, that this Resolution does not suggest in any way that the United States of America stop nuclear weapons production unilaterally.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 considered Resolution C on Nuclear Weapons, introduced by William P. VonderHaar, M.D. Following testimony that the Secretary of the Cabinet for Human Resources is no longer a physician, which was one of the stimuli for this Resolution, and communication from the Cabinet for Human Resources indicating that this type of educational issue was not within the scope of its responsibilities, the Committee recommends that this Resolution be rejected.

Resolution F

Jefferson County Medical Society

Citicare

WHEREAS, Citicare is a proposed plan to revise the Medicaid Program for recipients of Aid to Families with Dependent Children (AFDC) in Jefferson County, and

WHEREAS, Citicare would create a prepaid primary care network providing capitated funding which would place the primary care physician at some financial risk, and

WHEREAS, Citicare promises to encourage proper utilization of the Medicaid Program by creating a single source of care for each recipient and by requiring physician preauthorization for emergency room visits and hospital admissions, now therefore be it

RESOLVED, that the Kentucky Medical Association express general favor for the concepts embodied in Citicare, and be it further

RESOLVED, that Jefferson County physicians be encouraged to become fully informed of all aspects of the proposal and to weigh carefully all aspects of the program on an individual basis before deciding whether or not to participate, and be it further

RESOLVED, that the KMA monitor Citicare's progress and evolution, and report its findings to the membership on a timely basis.

Resolution I

KMA Board of Trustees

Citicare

WHEREAS, the Cabinet for Human Resources has developed and plans to implement a radical new program called Citicare to provide medical care to Medicaid recipients and the medically indigent in Jefferson County, and

WHEREAS, this program may have a significant influence on the delivery of medical care and the input of government into that delivery, and

WHEREAS, any change to traditional care delivery modes should be closely monitored and carefully evaluated, and

WHEREAS, the Citicare concept may conceivably be expanded into a statewide program, now therefore be it

RESOLVED, that the Board of Trustees maintain vigilant scrutiny of the development, progress and evolution of the Citicare program to assure the medical welfare of the program's recipients and the appropriate effects on the practice of medicine, and be it further

RESOLVED, that KMA lend appropriate assistance as may be indicated and as may be requested by the Jefferson County Medical Society, or any other component medical society, to modify or otherwise affect the Citicare program, and be it further.

RESOLVED, that KMA finds that the Citicare plan currently proposed for Jefferson County has the potential to be detrimental to high quality medical care and therefore recommends that introduction of Citicare should be delayed until all of these problems can be resolved.

Recommendations, Reference Committee No. 5:

Reference Committee No. 5 considered Resolution F, submitted by the Jefferson County Medical Society, and Resolution I, submitted by the Board of Trustees, jointly, and heard testimony from members of the Board of Trustees, representatives of the Cabinet for Human Resources, the Jefferson County Medical Society and other interested parties. The Committee recommends that Resolutions F and I be rejected,

and the following Substitute Resolution be introduced and adopted:

WHEREAS, the Cabinet for Human Resources has developed and plans to implement a radical new program called Citicare to provide medical care to Medicaid recipients in Jefferson County, and

WHEREAS, Criticare would create a prepaid primary care network providing capitated funding, which would place the primary care physician at some financial risk, and

WHEREAS, this program may have a significant influence on the delivery of medical care and the input of government into that delivery, and

WHEREAS, any change to traditional care delivery modes should be closely monitored and carefully evaluated, now therefore be it

RESOLVED, that the Board of Trustees maintain vigilant scrutiny of the development, progress and evolution of the Citicare program to assure the medical welfare of the program's recipients and the appropriate effects on the practice of medicine, and be it further

RESOLVED, that KMA urge the Jefferson County Medical Society to exercise maximal caution in its involvement with the development and implementation of Citicare, and be it further

RESOLVED, that KMA lend appropriate assistance as may be indicated and as may be requested by the Jefferson County Medical Society, or any other component medical society, to modify or otherwise affect the Citicare program.

A second to the Reference Committee's recommendation was made from the floor.

A motion was then made from the floor by a Delegate of the Fayette County Medical Society that a substitute Resolution submitted by the Society be adopted in lieu of the substitute offered by the Reference Committee. The motion was seconded.

The issue was discussed at length; a call for the question was heard; and a motion made, seconded, and carried to stop debate.

A hand vote was taken, and the Tellers reported the results of 94 votes in favor of the substitute Resolution offered by Fayette County, and 42 votes in opposition.

The following substitute Resolution submitted by the Fayette County Medical Society was therefore adopted:

Substitute Resolution

Citicare

WHEREAS, the Cabinet for Human Resources has developed and plans to implement a program called Criticare intended to control the provision of care to medicaid recipients and the medically indigent in Jefferson County, and

WHEREAS, this program may have a significant influence on the delivery of medical care and the input of government into that delivery, and

WHEREAS, any change to traditional care delivery modes should be closely monitored and carefully evaluated, and

WHEREAS, the Citicare concept may conceivably be expanded into a statewide program, now therefore be it

RESOLVED, that the Board of Trustees maintain vigilant scrutiny of the development, progress and evolution of the Citicare program to assure the medical welfare of the program's recipients and the appropriate effects on the practice of medicine, and be it further

RESOLVED, that the KMA lend appropriate assistance as may be indicated and as may be requested by the Jefferson County Medical Society, or any other component medical society, to modify or otherwise affect the Citicare program, and be it further

RESOLVED, that KMA finds that the Citicare plan currently proposed for Jefferson County has the potential to be detrimental to access to care, particularly when specialty care is indicated, and therefore recommends that introduction of Citicare should be delayed until problems can be properly evaluated and resolved.

Mr. Speaker, I recommend the adoption of the report of Reference Committee No. 5 as a whole as amended.

I would sincerely like to thank the other members of the Committee: David C. Liebschutz, M.D., Danville; Garner E. Robinson, M.D., Ashland; N. H. Talley, M.D., Princeton; and Lolita S. Weakley, M.D., Louisville; for their work. A special thanks to Ms. Sharon Heckel for her assistance.

Reference Committee No. 5:
Edwin J. Nighbert, M.D., Louisville, Chairman
David C. Liebschutz, M.D., Danville
Garner E. Robinson, M.D., Ashland
N. H. Talley, M.D., Princeton
Lolita S. Weakley, M.D., Louisville

• **Editorial Note: Unless otherwise indicated, the Reference Committee action on each report and Resolution was accepted as printed here. Any opposing action taken is stated in discussion following the item.**

Reference Committee No. 6

Lynn L. Ogden, M.D., Louisville Chairman

Reference Committee No. 6 considered the following Reports and Resolution:

36. Report of the Advisory Committee to The Department for Human Resources
37. Report of the Judicial Council
38. Report of the Rural Kentucky Medical Scholarship Fund Board of Directors
39. Report of the Physician-Attorney Liaison Committee
40. Report of the Membership Committee
41. Report of the Placement Services Committee
42. Report of the Committee on Constitution and Bylaws
43. Report of the McDowell House Board of Managers

 Medical Student Section Constitution and Bylaws

 Resolution E—Discrimination Regarding Hospital-Owned Office Buildings (Jefferson County Medical Society)

ITEMS FOR CONSENT

Reference Committee No. 6 reviewed the following items and recommends they be placed on the Consent Calendar, without discussion, with praise to the Committees for a job well done:

37. Report of the Judicial Council—filed
38. Report of the Rural Kentucky Medical Scholarship Fund Board of Directors—filed
40. Report of the Membership Committee—adopted
41. Report of the Placement Services Committee—adopted
43. Report of the McDowell House Board of Managers—filed

 Medical Student Section Constitution and Bylaws—adopted

Report of the Judicial Council

The Judicial Council has continued its routine of bimonthly meetings to consider questions of ethics and conduct of members and serve as the ethical arbiter of the Association. The work of the Council and the issues it must face are often difficult and, at times, even unpleasant, but all matters are confronted with a sincere, humane and compassionate approach that includes consideration for both the science and the art of medicine.

Several situations were encountered this year that are of interest and application to the membership. These related to specific instances of practice questions, as well as broader philosophical issues.

With regard to practice questions, several complaints were received directed to individual physicians that required the Council's consideration. In one instance, information was given that a physician was giving inappropriate injections which gave no palliation to the medical problem. The situation, upon investigation, was referred to the Licensure Board for further follow up with the suggestion that further education was appropriate for the physician involved.

In another instance, complaints were made of indications of negligence in a case where certain laboratory studies were not a part of the specific treatment regimen. Investigation showed that the treatment rendered was appropriate for the local medical area, and that the entire episode of treatment was appropriate to the diagnosis and outcome of the patient's condition.

One situation was brought to the Council's attention that questioned a new mode of medical treatment. However, because the county medical society was closely involved and monitoring the treatment being given, the situation was referred to that society for resolution.

In a related situation, the Council was contacted by the Consumer Protection Division of the Attorney General's Office concerning the use of procaine for the prolongation of life. This action was being offered by a commercial company through mail solicitation. The Council advised that no beneficial effects from taking the procaine could be substantiated, and the offer appeared to be simply a method for profit.

Questions of practice propriety were also dealt with. One such question concerned the direction of patients to specific pharmacies to fill their prescriptions. The Council reiterated the appropriate action indicated in Section 8.06 [4] of the Opinions of the AMA Judicial Council, which holds that "a patient is entitled to a copy of his or her prescriptions . . .[with] the privilege of having the prescriptions filled wherever the patient wishes."

Along similar lines, the Council concurred with the opinion of the AMA Judicial Council with regard to patients; rights to copies of prescriptions for contact lenses. Not only is this a policy established by the Judicial Council, it also falls in line with an FTC ruling that requires physicians to provide patients with contact lens prescriptions.

With regard to practice procedures, a new policy has been established by the AMA concerning the appropriateness of charging interest on outstanding bills. The latest report of the AMA Judicial Council holds that the imposition of interest charges on overdue accounts is appropriate in some circumstances, but physicians who choose to add interest or finance charges to accounts not paid within a reasonable time, should be encouraged to make exceptions in hardship cases.

An inquiry was received concerning the Council's opinion on physician ownership of stock in BONCO Drugs. In response, the Council upheld the 1982 opinion of the AMA Judicial Council, 8.06 [1]: "A physician should not be influenced in the prescribing of drugs, devices or appliances by a direct or indirect financial interest in a pharmaceutical firm or other supplier . . ."

In response to an inquiry from the Board of Medical Licensure, the Attorney General's Office rendered an opinion concerning the use of the terms "physician and surgeon" by personnel other than medical doctors. The opinion unequivocably stated that such usage is misleading and should not be undertaken. This information was furnished to certain local organizations that provide information directories for general public use.

Although these items were major issues, the Council routinely deals with numerous other matters, and the meetings are sometimes arduous. It is gratifying to report that the Council enjoyed near perfect attendance for each of its meetings and members of the Council are to be congratulated for their sincere and devoted work. The Council would like to note the retirement from its membership after two successive terms of J. C. "Cam" Cantrill. The Council will sorely miss his insight, dedication and wit. His retirement is acknowledged with deep gratitude.

Glenn W. Bryant, M.D., Chairman

Report of the Rural Kentucky Medical Scholarship Fund, Inc.

The Rural Kentucky Medical Scholarship Fund, Inc. is now in its 36th year of existence. Although the Board has been confronted with a shortage of funds over the past several years, the Program is once again stable and making 40 loans a year to needy medical students. The annual budget for the Scholarship Program exceeds one-quarter of a million dollars of which 80% is directly loaned to students.

The Scholarship Board has taken steps this year to restrict the Scholarship Program so it influences recipients to enter practice in rural critical areas. The Program defines a critical area as a community that has a physician/population ratio of 1 to 3,500. There are currently 29 counties in the state that fall into this category. The Fund has also determined that specialty training programs will consist of Internal Medicine, Family Practice, OB/GYN and Pediatrics. There will be no subspecialization, and residencies in Surgery, Psychiatry and Emergency Medicine have been discontinued. Currently, the Fund has 100 recipients in either medical school or residency training.

The Fund's popularity continues to grow each year, and this year we were pleased to receive 39 applications for scholarship loans besides the 27 requests for renewals. It is regrettable that inflation has driven costs so high that we were able to award only 10 new loans this year. The Fund is extremely grateful to W. Grady Stumbo, M.D. and the Department for Human Resources for their continued support of the Scholarship Program. Without this support, the Fund would drastically have to cut the number of awards it makes each year. As has been mentioned in the past, the Fund utilizes a revolving fund that depends on the return of monies borrowed seven to eight years prior. These monies were loaned at low interest rates and the return is minimal, especially when at least 40% of these are forgiven as scholarships.

The Fund continues its ongoing solicitation program that has resulted in $4,000 contributions being received from past recipients and physicians inter-

ested in the Program. The Fund also appreciates the continued financial assistance from the Kentucky Medical Insurance Company and the Ashland Oil Foundation, Inc. It is hoped that additional support can be obtained from other major corporations and manufacturers in the state.

The Board of Directors of the Scholarship Fund is continuing its efforts to solicit funds and provide assistance to the most needy medical students in the state. Our goal is the same as it was when the Program was started 36 years ago, which is to locate primary care physicians in the underserved areas of the state. Even with the influx of physicians, there is still a problem with maldistribution of physician services within the state. The Scholarship Program has proven to be a successful aid in securing physicians for rural areas. It has proven to be extremely successful in retaining physicians in the area after they have fulfilled their commitment. Kentuckians can be proud of this Program and with your continued support the Scholarship Program will continue to meet the needs of the Commonwealth.

Henry S. Spalding, M.D., President

Report of the Membership Committee

The Membership Committee has launched an intensified campaign this year to encourage nonmember physicians to participate in organized medicine. The theme of our program is "United We Stand" and it has been our effort to contact each physician in the state to inform them of the benefits of being involved in organized medicine.

The Committee has been working with staff to determine the number of nonmember physicians in the state. This extensive effort required a considerable amount of time on the part of each County Society Secretary which the Committee greatly appreciates. After the Committee had identified all potential members, they sought to encourage the County Society to actively recruit nonmembers on a one-on-one basis. The County Society was encouraged to invite these individuals to attend their County Society meetings and other social events. In the major metropolitan areas, members of the Committee worked closely with the Membership Committee of the major County Societies. These groups determined a target group they felt was most likely to be interested in joining organized medicine. The Committee is concentrating its efforts on physicians who have been in practice less than five years.

Preceding this drive the Association mailed out a series of brochures entitled the "The Great Debate—To Join Or Not To Join." This series of five brochures addresses the five major reasons physicians give for not joining organized medicine. The Committee then followed with the one-on-one program to solicit new members.

At the time of this report's composition, the Committee is actively pursuing this program but we are unable to provide precise ratios and membership figures at this time. Currently, we have approximately 80% of the practicing active physicians in the state as members of the Association. Fifty percent of the medical students are members; however, less than 10% of the resident physicians are affiliated with the KMA. Although the resident physicians are not included in our one-on-one campaign, they will receive a number of mailings during the year encouraging their involvement. The Membership Committee found that to analyze our current membership enrollment was not an easy task. There are a lot of factors that influence the ratio of practicing physicians in Kentucky and KMA membership. The Committee requests all members to encourage their nonmember colleagues to become active in organized medicine. This is a member oriented Association and every member should strive to insure that all of their colleagues are involved and support organized medicine.

The Committee felt it appropriate to publish a roster of membership for 1982. The first indication shows the roster, although not perfect, was well received and could possibly become an annual publication. The Committee will be conducting a random survey to determine the membership interested in the roster and other member services currently provided. This input to the Committee will hopefully provide insight into the desires of the membership and help the Committee on recommendations to the Board for future benefit services.

The Medical Student Section, which the membership Committee advises, is submitting its Constitution and Bylaws for consideration by the House. The Committee is pleased to observe the interest being generated by the students in becoming actively involved in organized medicine. The students are taking on their own one-on-one campaign to recruit their peer group into the Association. After formal recognition of the MSS by the House, the students plan to begin conducting their business as outlined in their Constitution and Bylaws, which includes an Annual Meeting of their membership. The Committee hopes the MSS will be instrumental in acquainting students with the benefits and need for organized medicine. If these two items can be instilled upon the students during their medical education, involvement in organized medicine will be insured in the future.

As Chairman, I would like to take this opportunity to thank the Committee, Trustees, County Society

Secretaries and Staffs who have actively participated in this recruitment effort. We are assured from these efforts that new membership goals will be obtained.

Harold Haller, M.D., Chairman

RECOMMENDATIONS:

1. The Membership Committee recommends that the House of Delegates strongly encourage its constituents to actively recruit nonmember colleagues into membership in the Association.

Report of the Placement Services Committee

The Placement Services Committee is pleased to inform the House of Delegates of its successful presentation of the Third Annual Physician Recruitment Fair in Louisville last October. Over 55 communities and 100 potential physician candidates participated in the one-day program. The final plans are now being made for the presentation of the Fourth Annual Physician Recruitment Fair, which will be held at the Hyatt Regency/Lexington Center on October 16, 1982.

The Fair will again feature its community exhibit hall for physicians and residents who may visit with representatives of these communities. They will be exhibiting attractions depicting recreational, social and economical features of their communities. Communities that have participated over the past several years find the program beneficial in laying the groundwork for establishing their first contacts in recruiting a physician for their community. The Committee this year hopes to encourage more smaller, rural communities to participate in the program.

The Committee continues to monitor the placement services activities that are carried on by the Association for the benefit of physicians seeking and communities offering practice opportunities. This clearinghouse of information has been one of the key sources of data for physicians and communities engaged in their endeavor. The Department for Human Resources, Division for Primary Care has begun to actively assist communities in the State with physician recruitment. The Division has hired a full-time physician recruiter who is to assist communities with evaluating their needs and advise them on ways to establish incentive packages and create a search committee. This individual will also attend national medical meetings to recruit physicians into the State. The main target of this division is the most critically underserved areas. The Committee has pledged to support this state effort by providing additional data and disseminating information on the availability of this program.

The Committee has received several requests to provide assistance to physicians who have either entered retirement and wish to continue practicing or young physicians just entering practice who would like to provide part-time assistance to supplement their income. The Committee has developed a program to answer this need. The part-time practice opportunity program provides assistance similar to that made available through the Placement Service Program. Physicians interested in providing part-time services are requested to complete the necessary questionnaires and will be referred to the communities seeking their assistance. Communities seeking this assistance can contact the KMA Headquarters Office and receive a list of individuals willing to provide these services and have their job opportunity listed. The success of the program will depend on its utilization, which the Committee will monitor closely.

The Committee appreciates the continued support of the Board and the House in its presentation of the Physician Recruitment Fair. I would like to take this opportunity to thank the members of the Committee who have diligently provided their services and support of these continuing programs.

John M. Baird, M.D., Chairman

RECOMMENDATION:

1. The Committee recommends that the House of Delegates reaffirm its sponsorship of the scheduled Physician Recruitment Fair for October 16, 1982 and continue its support for future fairs.

Report of the McDowell House Board of Managers

The McDowell House and Apothecary Shop are in excellent condition. During the year extensive repairs were completed, aided greatly by the $30,000 grant from the Kentucky Heritage Commission. However, additional funds were necessary, and they were drawn from those saved for this purpose. Future grants from the Kentucky Heritage Commission may not be possible. Emergency and unexpected situations must be expected at intervals. For this reason, the Board continues to save a proportion of the operating funds and contributions each year. A small separate fund for endowment is slowly increasing in amount.

During the year a statement of the purposes of the McDowell House was developed by a special committee and approved by this Board. They are summarized as follows:

1. The first purpose is that of preservation of this historic structure.
2. Those individuals who are genuinely interested in the life and operations of Ephraim McDowell are invited especially to visit the House.
3. Visitors to the House should be limited to 70 at any single time.
4. Educational uses of the House should limit the number of children to 12, with two supervising adults in any single room at any given time.
5. Requests for unusual or special purposes of the House will be referred by the hostess to the local members of the Board for approval, later to be approved by the entire Board.

The KMA Auxiliary has contributed $13,760 in the past three years for maintenance, repainting and refurbishing the House. Appreciation for this laudable effort has been expressed to officers of the Auxiliary. Several county auxiliaries, in addition to the State Auxiliary, have given funds during the year for needed improvements.

Earl P. Slone, a longtime member of the Board of Managers and former Dean, College of Pharmacy at the University of Kentucky, submitted his resignation. His interest and contributions throughout the years and his particular interest in the Pharmacy of the McDowell House are, indeed, appreciated.

The McDowell House Board is proceeding to make arrangements for preservation of historic records and documents which relate to the House.

This historic shrine is, indeed, a credit to the Kentucky Medical Association.

Laman A. Gray, Sr., M.D., Chairman

Medical Student Section Constitution

Article I. Name of Organization: The name of this organization shall be the Medical Student Section of the Kentucky Medical Association (MSS).

Article II. Purpose: The purpose of this organization shall be to encourage and support the active involvement and participation of medical students in the Kentucky Medical Association and to provide a forum for discussion of student opinions and ideas with organized medicine. The MSS shall also support the purposes of the KMA as stated in its Constitution.

Article III. Composition & Meetings: The Medical Student Section shall be composed of KMA student members. Students enrolled in Kentucky medical universities and residents of Kentucky attending an AMA-approved out-of-state medical school shall be eligible for membership. Only members of the Medical Student Section of the KMA will be eligible to vote and hold office in the MSS.

The Medical Student Section shall hold Annual and Special Meetings at such times and places as may be determined by the Governing Council in accord with the provisions of the Medical Student Section Bylaws.

Article IV. Officers: Section 1. The officers of this association shall be the President, Chairperson and Secretary/Treasurer of the Governing Council.

Section 2. The eligibility, duties and terms of officers of the Section shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the Governing Council from its own membership. This election of officers shall occur at the first regular meeting immediately following the elections of the representatives referred to in Article V of this Constitution.

Article V. Governing Council: There shall be a Governing Council of the Medical Student Section consisting of five representatives from the University of Louisville and five from the University of Kentucky medical schools. Each school shall have the responsibility for the election of a student delegate to the KMA, student delegate to the AMA-MSS and three members at large. Elections of these individuals will be held in April at each university. The five members from each school will meet immediately following their election and elect a President, Chairperson and Secretary-Treasurer of the Governing Council.

Governing Council shall meet biannually at such time and place as determined by a majority of its members. The Chairperson of the Governing Council shall notify the members of the Council in writing, of the time and place of said meetings, at least 30 days prior to the meeting.

The Governing Council shall have the authority to conduct all business of the MSS and to prepare resolutions and reports during the interim periods between the Annual Meetings of the Medical Student Section.

The Governing Council shall submit nominations for student committee members to the KMA Board of Trustees at least 60 days prior to the September Annual Meeting of the KMA.

Article VI. Funds & Expenses: The funds for meeting the expenses of the Section shall be raised by such methods and from such sources as may be selected by the Governing Council. Assistance from the KMA will be augmented by the collection of dues and/or assessments as deemed necessary and authorized by the Governing Council. The Secretary/Treasurer shall be responsible for all financial affairs of the KMA-MSS.

Article VII. Referendum: The student membership of the MSS, by written petition signed by not less than 10% of the active student medical membership, may obtain a referendum on any question pending before or policy adopted by the Governing Council. Upon receipt of the petition the Governing Council shall submit the question to the active student membership. The question shall be submitted by mail to all active student members at their address of record and, if a majority of those members signify their approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding on the Medical Student Section.

Article VIII. Amendments: The Medical Student Section may amend any article of this Constitution by two-thirds vote of its active student membership at the regular Annual Meetings of the Section, provided that such amendment shall have been reviewed by the active student membership at each university 60 days prior to the Annual Meeting. Amendments become effective when ratified by the KMA House of Delegates in accord with Chapter I, Section 2 (f) of the KMA Bylaws.

Article IX. Definitions: Whenever used in this Constitution, the Articles of Incorporation or the Bylaws:

a. "Annual Meeting" means the Annual one-day meeting of the MSS.

b. "Governing Council" means the jointly-elected body that has the authority to handle all business of the Section.

c. "Special Session" means a special called meeting of the general membership of the MSS.

Bylaws

Chapter I. MEMBERSHIP

Section 1. All medical student members of the Kentucky Medical Association shall be considered active members of the Medical Student Section and shall have full rights and privileges, including the right to vote, hold office in the Medical Student Section and sit on the appropriate councils and committees of the KMA when appointed in accord with Chapter I, Section 2 (f) and Chapter VIII, Sections 1 and 2 of the KMA Bylaws.

Chapter II. ANNUAL & SPECIAL MEETINGS

Section 1. The Section shall hold its Annual and Special Meetings at such times and places as may be determined by a majority of the members of the Governing Council.

Section 2. Student members in attendance at any meeting shall register attendance and obtain verification by reference to the roster of the Section. Student Members shall receive a badge which shall be evidence of their right to all privileges of membership at that meeting. Members shall not take part in any of the proceedings of any meetings until they have complied with the provisions of this Section.

Chapter III. GOVERNING COUNCIL

Section 1. The Governing Council shall be the executive body of the MSS and shall exercise the powers and duties conferred upon it by the medical student members of the MSS and the Constitution and Bylaws. The Governing Council shall consist of the five representatives from each of the medical schools in the State. This includes the delegate to the AMA-MSS (or his alternate) from each school, the delegate to the KMA (or his alternate) from each school and three at-large members from each school. The Governing Council shall elect a President, Secretary/Treasurer and Chairperson of the Governing Council from its membership. Three representatives from each school must be present in order that a quorum exists for the transaction of all Governing Council business. Between sessions of the Governing Council the student representatives shall be responsible for the dissemination of information to the student membership and the collection and transmittal of concerns and requests to the Governing Council when it next meets.

Section 2. Duties of AMA-MSS Delegates: The delegates shall have the authority to introduce resolutions to the AMA-MSS in accordance with the Constitution and Bylaws of the AMA, KMA and MSS. The delegates shall coordinate activities with their respective schools, the Governing Council of the MSS and the Board of Trustees of the KMA as they relate to the business of the AMA-MSS.

Section 3. Duties of the KMA Student Delegates: The student delegates shall represent their particular schools before the KMA House of Delegates and shall have the authority to introduce resolutions to the KMA House in accordance with the rules of that Body. In presenting these resolutions, the KMA student delegates shall be directed by the Governing Council of the Medical Student Section.

Section 4. Duties of Alternate Delegates: The delegates to the Governing Council shall have the authority to appoint those of its members who have not been formally elected KMA delegates to act as alternate delegates for those positions. These alternates shall assume the duties of the elected delegates in the latter's absence, and they shall be from the same medical schools as the individuals in whose stead they may be required to serve.

Chapter IV. Election of Officers & Student Representatives

Section 1. The University of Louisville's KMA medical student membership and the University of Kentucky's KMA medical student membership shall elect from the active student membership population five representatives from each school. Of the five positions elected from each school, one individual should be designated as the school's delegate to the AMA-MSS and another individual should be designated as the delegate to the KMA. The other three representatives elected at large shall serve as alternate delegates as deemed by the Governing Council based on need and scheduling. The five representatives from each school shall serve for one-year terms and may be elected to successive terms. All active student members shall be eligible for election.

Section 2. The President, Chairperson and Secretary/Treasurer of the Governing Council shall be elected by the Governing Council at the first meeting of the new Council.

Section 3. The student representatives from each of their respective schools shall act as the nominating committee in order to verify the eligibility and willingness of each candidate to serve. The committee shall accept and post for information all eligible and willing candidates for the five representatives to be elected. The information shall be posted at least two weeks prior to the election of the representatives. Each school shall have the discretionary authority to determine how these five representatives shall be elected.

Section 4. The Governing Council of the MSS shall have the responsibility of notifying KMA of the five representatives of each school and the officers of the Council.

Chapter V. Duties of Officers

Section 1. The President shall preside at all special and Annual Meeting sessions of the Section and shall nominate student members for all KMA committees which have student participation. He shall deliver an annual address at the annual session of the Medical Student Section and make a special report on behalf of the MSS before the KMA House of Delegates at its Annual Meeting in September. The President shall represent the Section at all functions and shall maintain liaison between the MSS and the Board of Trustees of the KMA.

Section 2. Chairperson of the Governing Council. The Chairperson of the Governing Council shall preside over each meeting of the Governing Council and shall perform such other duties as necessary to carry out the dictates of the Governing Council. The Chairperson shall appoint all committees of the Medical Student Section with the approval of the Governing Council. The Chairperson shall assume the duties of the President in his absence and shall perform such other duties as required.

Section 3. Duties of At-Large Representatives: The at-large representatives shall have the responsibility of keeping student membership informed and shall act as a reciprocating feedback to the Governing Council on policy and programs. The at-large representatives shall also have the responsibility of serving in the capacity as alternate delegates to the AMA-MSS or KMA when so designated by the Governing Council.

Section 4. Duties of Secretary/Treasurer. The Secretary/Treasurer shall keep the records of all KMA-MSS meetings and also conduct the financial affairs of the KMA-MSS. The Secretary/Treasurer shall also make a report to the Annual Meeting of the KMA-MSS.

Chapter VI. Committees & Commissions

Section 1. The Governing Council of the MSS shall have the authority from time to time to appoint fixed duties of and abolish such standing committees and commissions as it deems necessary or desirable to assist the Medical Student Section in its fields of business.

Section 2. No committee or commission shall have the power or authority to fix or determine Medical Student Section policy or commit the Section to any course of action, such powers being expressly reserved to the Governing Council.

Chapter VII. Amendments

Section 1. These Bylaws may be amended at a general meeting of the membership of the Medical Student Section, provided: (1) That any amendment shall be submitted, in writing, to the Governing Council at least 60 days prior to the Session and such amendment is reviewed by the Medical Student Section membership prior to the Session; (2) Where such amendment relates to a policy statement of the MSS, it shall be introduced at the Annual Meeting of the MSS by the Governing Council and shall be debated by those members in attendance; (3) For any amendment to take effect, approval of two-thirds of the active medical student membership in attendance, plus approval of the KMA House of Delegates, shall be required.

End of Consent Calendar Items

Report of the Advisory Committee to the Department for Human Resources

The Advisory Committee to the Department for Human Resources met soon after the Annual Session in September with the Secretary, W. Grady Stumbo, M.D. The Secretary had been previously advised of all matters adopted by the House of Delegates relating to the Department, and each of these was discussed at the meeting.

With regard to regionalization of boards of health, the Department planned to continue its efforts toward this end, with local boards having the option to remain local or regionalize. Regionalization was an effort to continue to provide the same services to all counties using fewer funds, which were further restricted by the Federal block grant funding mechanism. In this area, it was noted that regionalization regulations would require 25% physician representation on health boards.

The requirement that each preschool child receive a physical examination by a physician was discussed and KMA's adamant position of support was registered.

A single area reimbursement formula for physicians by Medicaid was discussed, as was physician input into the program in the context of changing Federal appropriations. There appeared to be a great deal of uncertainty as to how the Medicaid program would be operated so the Secretary could make no commitments. (The Legislature did enact a single payment area reimbursement during its 1982 General Assembly.)

Preauthorization for certain surgical procedures, disallowance for certain other surgical procedures, and a second opinion program were discussed. The Secretary indicated that the second opinion program was no longer being considered, but that disallowance of some elective procedures and preauthorization were still being given some thought. (Subsequently, a list of procedure was developed that could only be provided on an outpatient basis. This provision, however, included a mechanism for the physician to "override" a given procedure and hospitalize the patient when medically indicated.).

The Committee discussed the moratorium on new hospital bed construction in Fayette and Jefferson Counties. The Secretary indicated that the reason for the moratorium was to commit more resources to new hospitals out in the state where the need was considered greater. He indicated his feeling that hospitals should be peer group categorized, based on the technology and level of services provided. (Since the meeting, a waiver was granted by the Department of Health and Human Services allowing reimbursement to hospitals based on peer grouping. This reimbursement formula has come into effect.)

Reimbursement of uncollectible debts in secondary perinatal units was discussed. It was the Department's position that because 90% of perinatal monies now go to tertiary level units, more should be dispersed to primary and secondary centers.

The issue of funding for eye services, as embodied in Resolution S [1981], was considered. The Secretary indicated that funds appropriated for nonmedical eye services were equally available to both ophthalmologists and optometrists and when expended, this portion of the Medicaid program would cease. However, medical eye services performed by physicians would continue as would all other physician services.

The Committee related the position of the house on poison control centers to the effect that both regional centers and a central state center should be maintained.

Adedquate funding for indigent care and the teaching hospitals was discussed and the Secretary indicated that this was a matter of ongoing consideration.

The position of the House was related concerning the possibility of the Chairman of the Certificate of Need Board being a provider. At this time, there was some question if Federal regulations would allow this. (Subsequently, a KMA-supported attempt to insert this provision in the new CON law was made, but did not pass the Kentucky General Assembly.)

The Committee related the position of the House, also, on Physician Assistants. The response of the Secretary was that the continuation of the P.A. program at the University of Kentucky would have effect on ultimate passage of any proposed legislation, but that the Department would not take a position.

KMA's position on mandating that the Commissioner of Health be a physician was related and the Secretary supported this view. (Such a provision was successfully supported by KMA in the General Assembly.)

Mandatory child restraints were considered. Obviously, the Department was in favor of legislation to this extent and would support it in the General Assembly. (KMA supported legislation on this issue, which was successful in the General Assembly.)

Free-standing emergency care clinics were considered, and the Secretary indicated that most of the clinics would probably not fit the definition of a physician's office, as stated in statutes, and a CON would probably be required. (Several discussions with the Secretary and activities by local county medical societies occurred after this meeting. An apparent trend is that many such groups will not be required to have

a CON if the term "emergency" is not vaguely presented.)

Throughout the year, several other issues were considered that affected the Department for Human Resources but that occurred, for the most part, in meetings of the Executive Committee or the full Board of Trustees. Discussions of these issues is contained in other reports. These included such issues as proposed regulations dealing with eye care for newborns, radiation advisory issues and inspection of radiologic equipment, preadmission evaluations, long-term care review and others. A major DHR related concern which will receive attention elsewhere is the "CITICARE" program, which contains a capitated medical service provision, and would be implemented in Jefferson County.

Richard F. Hench, M.D., Chairman

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 reviewed the Report of the Advisory Committee to DHR. The Committee recommends that the Kentucky Medical Association work during the next session of the General Assembly for the support of penalties for failing to comply with the mandatory child restraint law. The Reference Committee recommends this report be adopted.

The Speaker advised the House that the report of the Advisory Committee to the Department for Human Resources, since it contained no recommendations, should be filed rather than adopted. The House concurred with this editorial change.

The Speaker then heard a motion from the floor, which was seconded and carried, that the Reference Committee's recommendation—that the Kentucky Medical Association work during the next session of the General Assembly for the support of penalties for failing to comply with the mandatory child restraint law—be adopted.

Report of the Physician-Attorney Liaison Committee

The Physician-Attorney Liaison Committee continues to function as an ongoing Committee and is available to review and offer suggestions and alternatives in settling differences between the two professions. We believe we have an excellent relationship with the Kentucky Bar Association and compliment them for their commitment to the ideas and rules as set forth in the agreement by which the Joint Committee was established.

The 1981-82 year has been a very quiet year and, quite frankly, we are puzzled by the lack of complaints received by the Committee. We wish to call the attention of the membership to the Committee and offer our availability in attempting to resolve any differences that may occur. We urge every member to review the Interprofessional Code and to contact the KMA Office or Committee members if you have questions or need assistance.

The Committee extends its congratulations to Mr. John J. O'Hara, a former member of the Committee, who was recently appointed to the Kentucky Supreme Court by Governor John Y. Brown, Jr.

As Chairman I wish to thank the members of the Committee for their assistance and service to the Association and we look forward to strengthening the bond which has been established to better serve the medical and legal communities.

Thomas M. Marshall, M.D., Chairman

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 reviewed the Report of the Physician-Attorney Liaison Committee. The Committee feels that the inactivity of this Committee indicates a lack of usefulness to the Kentucky Medical Association. Reference Committee No. 6 recommends to the House of Delegates that it consider abolishing the Physician-Attorney Liaison Committee. The Reference Committee recommends this report be filed.

A motion was made and seconded from the floor that the section of the Reference Committee recommendation dealing with filing the report of the Physician-Attorney Liaison Committee be adopted. Motion carried.

Lee Hess, M.D., a member of the Board of Trustees, was recognized to speak to the Reference Committee recommendation that the Physician-Attorney Liaison Committee be abolished. Doctor Hess stated that unfortunately the report of the Committee did not emphasize its importance as most of the Committee's activity is handled by mail and telephone contact; and further stated he felt it would be detrimental to the Association to abolish the committee.

On a call for the vote, the Reference Committee's recommendation that the Physician-Attorney Liaison Committee be abolished was rejected.

Report of the Committee to Study the Constitution and Bylaws

The KMA Committee to Study the Constitution and Bylaws met on June 9, 1982, pursuant to the directive of the Board of Trustees to consider a proposed change in the Bylaws. The Board had instructed the Committee to revamp the Bylaws in a fashion

such that they would parallel the current AMA procedure in dealing with "Life" or "Dues Exempt" members. After a substantial amount of deliberation with respect to the matter, the Committee agreed on Recommendation No. 1 which follows and which is offered for your approval.

The Committee was also concerned with the matter of "Associate Membership" after problems with this membership category were brought to the Chairman's attention. After reviewing the situation, the Committee forwarded the following statement to the Board for its consideration:

The Constitution and Bylaws Committee of the Kentucky Medical Association takes note of Chapter I, Section 1 of its Bylaws, which states in pertinent part:

Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component society unless he is a member, in good standing of this Association.

This provision should be read in conjunction with Chapter I, Section 2 (d) which states:

Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

1. *Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.*
2. *Dentists may be invited to become associate members.*
3. *Physicians residing and/or practicing in communities bordering Kentucky who are active members of their home state and county societies and who wish to become members of KMA on an other than active basis may become associate members.*

Associate members shall not have the right to vote nor to hold office, but shall receive the ***Journal*** *and other publications of the Association.*

In light of the aforestated requirements, the Committee feels that anyone carried on the rolls of a component county society as an "associate member" must also be an "associate member" of the Kentucky Medical Association. If the KMA Board of Trustees wishes to grant an exception to the policy established by our Bylaws in the case of Jefferson County or any other component society, the criteria giving rise to such an exception should be specifically defined. It may be that terms such as "affiliate" or "supporting" more accurately describe the role played by certain individuals who are now carried on component society rolls as "associate members." Whatever the case, the Committee feels that individuals are now classified by various component societies as "associates" when they do not meet the KMA Bylaws rules for that membership category.

Staff was requested to act as liaison with the officers of the Medical Student Section in order that potential problems with that Section's Constitution and Bylaws might be eliminated.

The Chairman would like to take this opportunity to express his appreciation to the members of this Committee for their diligent attention and effort.

Robert L. McClendon, M.D., Chairman

RECOMMENDATIONS:

1. **In response to the Board's directive of December, 1981, regarding drafting of a Bylaws change to Chapter I, Section 2 (b), Life Members, the Committee determined that the following represents the better means for achieving the end desired by the Board:**

 Life Members. Component societies may elect as a life member any doctor of medicine or osteopathy who has served his profession with distinction and who ~~*has either reached the age of 70 or has retired from active practice,*~~ **meets the standards and requirements established by the KMA Board of Trustees.** *Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive The Journal and other publications of the Association.*

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 reviewed the Report of the Committee on Constitution and Bylaws. The Reference Committee recommends that the Recommendation of the Constitution and Bylaws Committee be rejected and offers the following recommendation instead.

Life Members. Component societies may elect as a life member any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from full-time active practice for reasons of health. Life members shall have

the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive the *Journal* and other publications of the Association.

The Reference Committee recommends this report be adopted, as amended.

R. J. Phillips, M.D. was recognized and made a motion on behalf of the Board of Trustees that the Reference Committee recommendation be rejected, and Recommendation 1 of the report of the Committee to Study the Constitution and Bylaws be referred to the Board of Trustees for further study.

The motion was seconded and carried.

Resolution E

Jefferson County Medical Society

Discrimination Regarding Hospital-owned Office Buildings

WHEREAS, reports have been received that one or more hospital-owned office buildings in the Louisville area allegedly have offered shorter term renewals at higher rental cost to some longstanding tenants, whose referral patterns were less favorable to the hospitals involved, and

WHEREAS, it is in the best interest of the patients in every community that a wide range of specialties and services be easily available, regardless of hospital referral patterns, and

WHEREAS, a hospital appropriately should have broad discretion in selecting tenants to occupy newly developed open space for the first time, and

WHEREAS, physicians who have well established offices in place in medical buildings should not feel coercion to move out as a result of referral patterns, and

WHEREAS, the Kentucky Medical Association has a strong desire that hospital medical staffs remain open and that a wide range of specialties and services be easily available for the benefit of all patients at hospital-owned medical buildings, now therefore be it

RESOLVED, that managers of hospital-owned office buildings not discriminate against established tenants based upon referral patterns.

Recommendations, Reference Committee No. 6:

Reference Committee No. 6 reviewed Resolution E—Discrimination Regarding Hospital-Owned Office Buildings, Jefferson County Medical Society. It was the feeling of the Committee that this issue was not relevant to the development of policy by the Association. The Committee recommends Resolution E be rejected.

The Committee recommends the adoption of the Report of Reference Committee No. 6 as a whole as amended.

I would like to thank the members of the Reference Committee, Harold T. Faulconer, M.D.; Larry C. Franks, M.D.; Robert E. Norsworthy, M.D.; and Frederick A. Stine, M.D., for their thoughtful consideration and careful deliberation of the remarks presented. A special thanks to our secretary, Lila Kleis.

Reference Committee No. 6:
Lynn L. Ogden, M.D., Louisville, Chairman
Harold T. Faulconer, M.D., Lexington
Larry C. Franks, M.D., Paducah
Robert E. Norsworthy, M.D., Hartford
Frederick A. Stine, M.D., Highland Heights

Election of Officers

Carl Cooper, Jr., M.D., Bedford, Chairman of the Nominating Committee, presented the slate of nominees for general officers, and each was elected by acclamation:

President-Elect	**James B. Holloway, Jr., M.D., Lexington**
Vice President	**Charles C. Smith, Jr., M.D., Louisville**

Past Presidents Hess and Parks escorted Doctor and Mrs. Holloway to the podium.

Doctor Cooper announced the results of the election for AMA Delegate and Alternate as follows:

AMA Delegate	**Harold D. Haller, Sr., M.D., Louisville**
AMA Alternate Delegate	**Kenneth P. Crawford, M.D., Louisville**

Doctor Cooper then submitted the following nominations for the offices of Trustees and Alternate Trustee on behalf of the district nominating committees:

Second District	**Albert H. Joslin, M.D. Owensboro**
Alternate	**John W. McClellan, M.D. Henderson**
Seventh District	**William P. McElwain, M.D. Lawrenceburg**
Alternate	**Cecil D. Martin, M.D. Carrollton**
Ninth District	**R. Kendall Brown, M.D. Georgetown**
Alternate	**Robert L. McKenney, M.D. Falmouth**
Tenth District	**Richard F. Hench, M.D. Lexington**
Alternate	**Christopher A. Boarman, M.D. Lexington**
Thirteenth District	**Garner E. Robinson, M.D. Ashland**
Alternate	**Jerald M. Ford, M.D. Ashland**
Fourteenth District	
Alternate	**Ronald D. Hall, M.D., Pikeville**

It was moved, seconded, and carried that the above slate of nominees be elected.

Election of 1983 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1983 Annual Meeting:

Cecil D. Martin, M.D., Carrollton, Chairman
John W. McClellan, Jr., M.D., Henderson
Richard S. Miles, M.D., Russell Springs
John D. Noonan, M.D., Paducah
Preston P. Nunnelley, Jr., M.D., Lexington

It was announced that the Board of Trustees would hold its reorganizational meeting on Thursday at noon in the Hyatt Suite in the Hyatt Regency Hotel.

Doctor Crowder adjourned the 1982 session of the House of Delegates at 8:40 p.m.

1982 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

CONSTITUTION

Article I. Name of the Association
Article II. Purpose of the Association
Article III. Component Societies
Article IV. Composition and Meetings of the Association
Article V. Officers
Article VI. House of Delegates
Article VII. Districts, Sections and District Societies
Article VIII. Board of Trustees
Article IX. Funds and Expenses
Article X. Referendum
Article XI. The Seal
Article XII. Amendments
Article XIII. Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Article V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session, annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component county societies in such a manner as may be provided in the Bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate Past Presidents shall be the ex-officio members of the House of Delegates and entitled to vote. All other Past Presidents and Vice-Presidents and Past Chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment, or vote.

Section 3. The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline-The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Life, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Life Members. Component societies may elect as a life-member any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Life members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members, Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the Kentucky State Board of Medical Licensure. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Dentists may be invited to become Associate members.

(3) Physicians residing and/or practicing in communities bordering Kentucky who are active members of their home state and county societies and who wish to become members of KMA on an other than active basis may become Associate Members.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in an accredited medical school in the United States shall be eligible for membership in the Medical Student Section of the Kentucky Medical Association. This Medical Student Section shall be governed by its own Constitution and Bylaws, which Constitution and Bylaws shall not be in conflict with those of the parent Kentucky Medical Association. In order to insure the absence of any such conflict, the initial Constitution and Bylaws of the Student Section, as well as any later amendments thereto, shall be given prior approval by a majority of all Delegates present at the Annual Meeting of the KMA House of Delegates. Individual students may apply directly to the State Association for membership and be assigned to the county society of their choice. The determination of such membership shall be coincident with the academic year of the institution in which the student is enrolled. Student members may not hold office in the State Association, but may be voting members of any State Association committee to which they are appointed. Student members may, however, hold office within the Student Section in accord with the provisions of that Section's Constitution and Bylaws. The Student Section will be represented in the House of Delegates through one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the Student Section membership attending the University of Louisville School of Medicine.

(g) Service Members, Members of the Association in good standing who enter military service and are ineligible for Association membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3. When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the resolution has been introduced, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interest of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:
No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.
No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.
No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.
No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.
No. 5—Jefferson.
No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.
No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.
No. 8—Boone, Campbell, and Kenton.
No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.
No. 10—Fayette, Jessamine, and Woodford.
No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.
No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.
No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.
No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.
No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.
District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years with the provision that no more then one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nominating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice-President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance

of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates and Alternate Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The *Journal of the Kentucky Medical Association* shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the *Journal* shall be elected by the Board. All money received by the *Journal* or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In the case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and

such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE—THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judical Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judical Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Medical Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In this case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Gievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judical Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments,

but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, $225; (except those physicians elected to KMA membership within six months of the completion of their residency, fellowship of fulfillment or government-obligated service shall pay $112.50 their first full year of membership); (2) Life Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25; (6) Student Members, no dues; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these By-laws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of the Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

A multi-county component society may be disaggregated so that an individual county society may regain independent status when a majority of the members in that county indicate their desire to reorganize. At that time the members from the withdrawing county shall forward a petition containing the signatures of a majority of the members in that county to be validated by KMA. The withdrawing county shall further forward a resolution to the KMA Headquarters Office to be submitted to the House of Delegates at its next regular meeting, requesting recognition as a county society and issuance of a charter, in accord with Chapter XII, Section 1 of the KMA Bylaws. Once this charter is issued, the new county society shall become a recognized entity at the beginning of the following KMA dues year and those counties remaining with the original multi-county unit may continue to function under their pre-existing charter.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcipt upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judical Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of nonaffiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

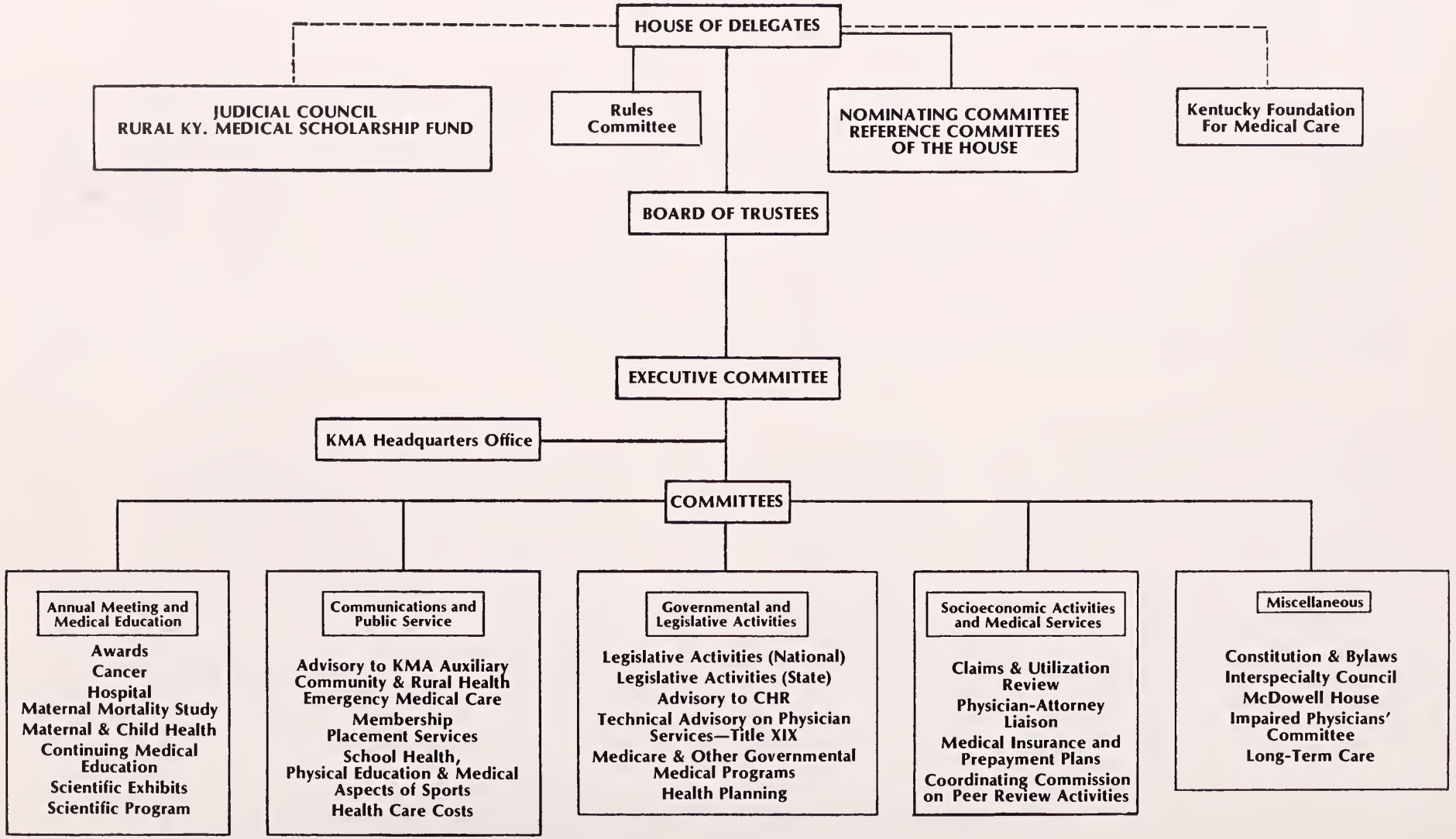
CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the Delegates present at a meeting of that session, provided: (1) the amendment proposed is presented in writing to the Delegates thirty days prior to the meeting, or (2) the amendment is introduced in writing at a regular meeting of the House of Delegates during the session and considered at the following meeting of the session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final meeting of a session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual Delegate at the final meeting of a session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final meeting is adjourned. Such an amendment, having not been postponed definitely for a period of one day, requires a two-thirds vote.

KMA Organization Chart—Revised November 1982



1982-83 KMA COMMITTEES

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Frank R. Pitzer, M.D., Hopkinsville

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George Thomas, M.D., Hopkinsville
Mark McCoy, Louisville (student)

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Dana Gibson, Lexington (student)

Bos Tabler, Louisville (student)
Barbara Cox, Louisville (Auxiliary member)

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Robert P. Belin, M.D., Lexington
Kentucky Dermatological Society
Steven J. Hodge, M.D., Louisville
Kentucky Society of Otolaryngology, Head and Neck Surgery, Inc.
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Kentucky Society of Eye Physicians and Surgeons
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Kentucky Society of Gastrointestinal Endoscopy
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Clem Burnett, M.D., Mayfield
Kentucky Neurosurgical Society
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KOGS-Kentucky Section ACOG
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James B. Holloway, Jr., M.D., Lexington, President-Elect
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3-4 International Medical Education Corporation, ECG Interpretation and Arrhythmia Management, Hilton Plaza Center, Kansas City, MO

3-5 International Medical Education Corporation, Ambulatory Electrocardiography: Clinical Applications, Methodology & Interpretation, Hyatt Regency, Chicago, IL

3-5 Emory University School of Medicine, Medical and Scientific Writing: A Symposium and Workshop, Woodruff Medical Center Administration Building Auditorium, Atlanta, GA

9 Norton's 25th Annual Postgraduate Medical Seminar, Norton Hospital Auditoriums-2nd Level, Louisville

10 Neoplasms of the Large Intestine, Rectum and Anus, James Graham Brown Cancer Center, Louisville

17-18 Trauma—The Disease of the 80's, Hyatt Regency Hotel, Lexington

JANUARY

8-9 14th Bethesda Conference, American College of Cardiology's Heart House, Bethesda, MD

8-14 Steamboat Springs, Colorado, Current Concepts in Pain Management. INFO: D. Berman, M.D., Program Director Current Concept Seminars, 3301 Johnson Street, Hollywood, FL 33021

8-16 Medical Updates IV: A Review of Recent Advances in Medicine, Quillen-Dishner College of Medicine, Marriott's Mark Resort, Vail, CO

17-21 14th Annual Cardiovascular Conference conducted by the American College of Cardiology and the Santa Barbara Heart & Lung Institute, Snowmass, CO

20-30 Winter Congress International Body Imaging Conference, St. Moritz, Switzerland

21 Seminar on Forensic Medicine, Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, TN

31-4 Digital Radiography 1983 National Symposium, The Diplomat Resort & Country Clubs, Hollywood, Florida

FEBRUARY

East Tennessee State University, School Health V, Johnson City, TN

20-25 14th Family Medicine Review—Session I, Hyatt Regency Hotel, Lexington

23-1 Hurly Medical Center, Adolescent/Young Adult Medicine, Wailea Beach Hotel, Maui, Hawaii

24 School Health V: Children's Problems with Schools, Quillen-Dishner College of Medicine, East Tennessee State University, Johnson City, TN

28-4 Steamboat Springs, Colorado, Current Concepts in Pain Management. INFO: D. Berman, M.D., Program Director Current Concept Seminars, 3301 Johnson Street, Hollywood, FL 33021

28-4 Annual Meeting of the United States—Canadian Division of the International Academy of Pathology, Atlanta Hilton, Atlanta, GA

MARCH

1-4 The University of Texas System Cancer Center, "Cancer Invasion and Metastasis, 36th Annual Symposium on Fundamental Cancer Research, Shamrock Hilton Hotel, Houston, TX

11-13 Advanced Cardiac Life Support Provider/Instructor Course, University of Kentucky Medical Center, Lexington

20-24 32nd Annual Scientific Session of American College of Cardiology, New Orleans, LA

31-1 12th Annual Medical Aspects of Sports Symposium: Prevention & Treatment of Athletic Injuries, Hyatt Regency Hotel, Lexington

APRIL

East Tennessee State University, Orthopaedic Operating Room Nurses: Implants and Instrumentation Techniques, Johnson City, TN

11-14 64th Annual Session of the American College of Physicians, Moscone Center, San Francisco, CA

15-16 Frontiers in Endocrinology and Metabolism, Hyatt Regency Hotel, Lexington

18-29 24th Postgraduate Institute for Pathologists in Clinical Cytopathology, The Johns Hopkins University School of Medicine, Baltimore, MD

21-23 Diagnosis and Treatment of Common Human Tumors, Hyatt Regency Hotel, Lexington

21-23 High Risk Pregnancy, Seelbach Hotel, Louisville

MAY

19 Allergy & Immunology, Seelbach Hotel, Louisville

20-21 Vitrectomy Workshop, Health Sciences Center, University of Louisville

22-27 14th Family Medicine Review—Session II, Hyatt Regency Hotel, Lexington

26-28 Adolescent Gynecology, Seelbach Hotel, Louisville

JUNE

2-3 Genetic Aspects of Common Genetic and Malformation Disorders, Hyatt Regency Hotel, Lexington

2-4 1st Symposium on Behavioral Neurology: Higher Cortical Functions and the Brain, Vanderbilt University School of Medicine, Nashville, TN

8-10 12th Update in OB-GYN, Hyatt Regency Hotel, Lexington

12-17 Family Medicine Review, Seelbach Hotel, Louisville

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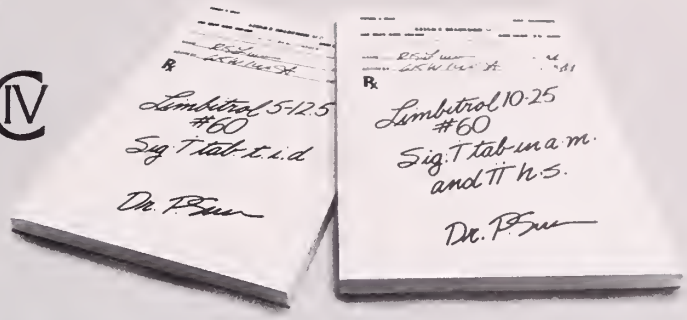
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References: 1. Claghorn J: *Psychosomatics 11*:438-441, Sept-Oct 1970. **2.** Rickels K: Drug treatment of anxiety, in *Psychopharmacology in the Practice of Medicine,* edited by Jarvik ME. New York, Appleton-Century-Crafts, 1977, p. 316. **3.** Baldessarini RJ, Tarsy D: Tardive dyskinesia, in *Psychopharmacology: A Generation of Progress,* edited by Lipton MA, DiMascio A, Killam KF. New York, Raven Press, 1978, p 999

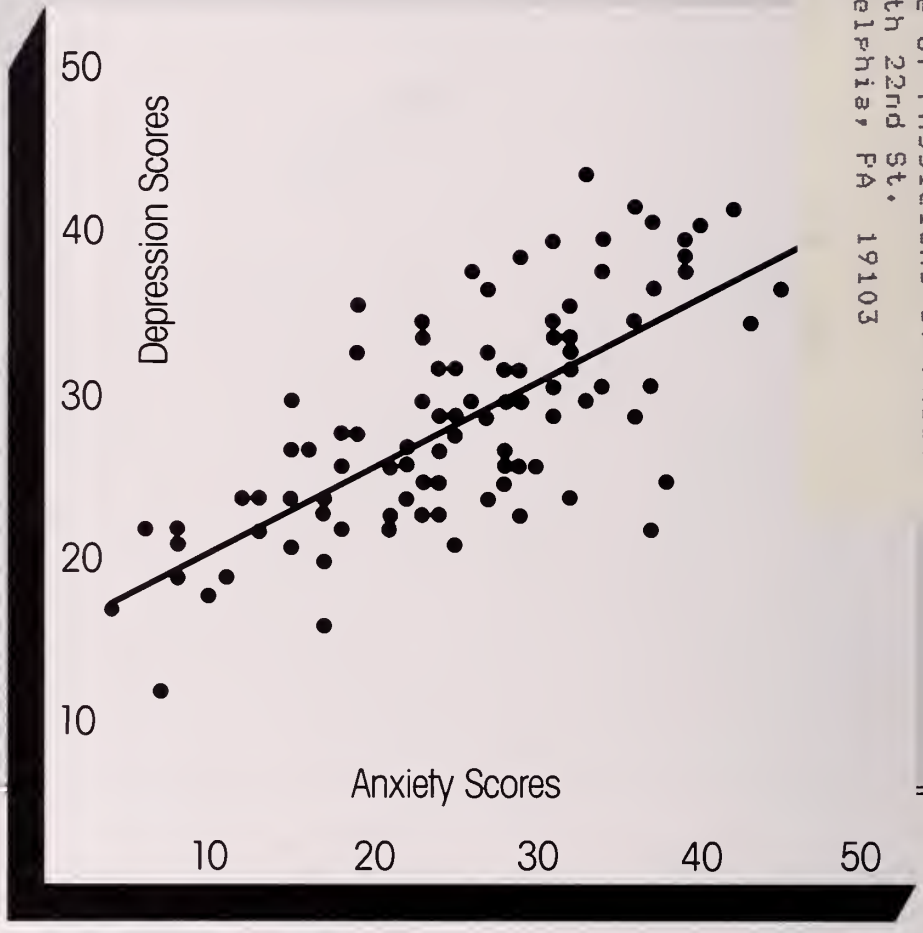
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Anticholinergic: Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.
Allergic: Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.
Hematologic: Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.
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